Annual Report
1982

noranda

Annual Meeting
April 29, 1983, 2:30 p.m.
Royal York Hotel, Toronto, Canada

Reference
In this report unless indicated otherwise, divisions and/or companies are wholly owned; production is for the calendar year 1982; tons means short tons of 2,000 lbs.; mineral inventories are as at Dec. 31/82; financial data is in Canadian dollars.

Transfer Agent and Registrar
Canada Permanent Trust Company, Toronto, Vancouver, Calgary, Winnipeg, Montreal, Saint John, N.B., Halifax, Charlottetown and St. John's, Nfld.

The Chase Manhattan Bank, New York, N.Y.

An English or French edition of this Report may be obtained from the head office of the Company, P.O. Box 45, Commerce Court West, Toronto, Canada, M5L 1B6.

On peut se procurer la version française ou anglaise de ce rapport en en faisant la demande au siège social de la compagnie, B.P. 45, Commerce Court West, Toronto, Canada, M5L 1B6.

Table of Contents

Directors and Officers/2
Directors' Report/3
Markets/6
Exploration/11
Oil and Gas/13
Research and Environmental Control/15
Venture capital/15
Projects/16
Safety/16
Metals and Minerals/17
Forest Products/28
Manufacturing/32
Accounting Policies/35
Financial Statements/36
Effects of Inflation/45
Operating Interests/46
Financial History/I.B.C.

noranda

Ownership

	Registered Holders Common shares	Ownership
Canada	30,700	91.67%
U.S.A.	2,300	6.93%
Other	500	1.40%
	Preferred shares	
Canada	5,670	99.81%
U.S.A.	18	.18%
Other	16	.01%

Highlights ($ millions)

	1978	1979	1980	1981	1982
Revenue	1,691.1	2,484.7	2,889.3	3,030.4	2,830.2
Income and production taxes	90.5	227.0	242.2	59.4	(65.9)
Share of earnings (losses) in Associates	49.3	70.1	83.1	(1.5)	(74.7)
Earnings (loss)	135.2	394.5	408.4	164.8	(82.9)
Working Capital	281.6	687.4	821.5	867.0	1,041.7
Long-term debt	604.1	602.5	580.5	922.3	1,722.9
Shareholders' equity	884.4	1,463.2	2,001.0	2,869.4	2,705.9

Total Employment

	1981 Totals	*Noranda & Subsidiaries*	*Associates*	*1982 Totals*
Canada				
Metals and Minerals	17,500	10,300	3,100	13,400
Manufacturing	5,100	4,100	100	4,200
Forest Products	27,500	3,600	18,900	22,500
	50,100	18,000	22,100	40,100
International				
Metals and Minerals	8,200	1,400	5,700	7,100
Manufacturing	15,500	5,100	10,100	15,200
Forest Products	5,700	1,100	4,600	5,700
	29,400	7,600	20,400	28,000
Totals	79,500	25,600	42,500	68,100

P.O. Box 45, Commerce Court West, Toronto, Canada M5L 1B6

Directors

(Year of election in brackets)

*Jack L. Cockwell (1981),
Executive Vice-President, Brascan, Toronto

James C. Dudley, (1970)
Chairman, Dudley & Wilkinson, New York

*J. Trevor Eyton, (1981)
President and C.E.O., Brascan, Toronto

Brian Flemming, (1981)
Partner in the legal firm of Stewart, MacKeen & Covert, Halifax

*Pierre Lamy, (1981)
Economist and Consultant, Montreal

Paul M. Marshall, (1981)
President and C.E.O., Westmin Resources, Calgary

David E. Mitchell, (1973)
President and C.E.O., Alberta Energy Company, Calgary

*André Monast, (1966)
Partner in the legal firm of Letourneau, Stein & Amyot, Quebec

Thomas H. McClelland, (1975)
Chairman of the Board, Placer Development, Vancouver

Donald S. McGiverin, (1980)
Governor, President and C.E.O., Hudson's Bay Company, Toronto

*W. Darcy McKeough, (1979)
President, Union Gas, Cedar Springs

Fernand Paré (1981)
President and General Manager, La Solidarité, Compagnie d'assurance sur la vie, Quebec

*Alfred Powis, (1964)
Chairman and C.E.O., Noranda Mines, Toronto

Antoine Turmel, O.C., (1981)
Chairman and C.E.O., Provigo Inc., Montreal

H. Richard Whittall, (1982)
Vice-Chairman and Director Richardson Greenshields of Canada Limited, Vancouver

*William P. Wilder, (1966)
Deputy-Chairman Hiram Walker Resources, Toronto

Harold M. Wright, (1981)
Chairman, Wright Engineers, Vancouver

*Adam H. Zimmerman, (1974)
President and C.O.O., Noranda Mines, Toronto

*Member of the Executive Committee

Honorary Directors

J. R. Bradfield, *Honorary Chairman*
A. O. Dufresne
L. Hébert
W. James
A. J. Little
L. G. Lumbers
R. V. Porritt
W. S. Row
J. D. Simpson
L. H. Timmins

Officers

Alfred Powis,
Chairman and Chief Executive Officer

Adam H. Zimmerman,
President and Chief Operating Officer

E. K. Cork,
Senior Vice-President-Treasurer

D. H. Ford,
Senior Vice-President-Comptroller

J. A. Hall,
Senior Vice-President-Mines

K. C. Hendrick,
Senior Vice-President-Sales

J. O. Hinds,
Senior Vice-President-Exploration & Development

R. P. Riggin,
Senior Vice-President-Corporate Relations

William Allan,
Group Vice-President

A. G. Balogh,
Group Vice-President

J. M. Gordon,
Group Vice-President

J. C. White,
Group Vice-President

R. C. Ashenhurst,
Vice-President & Secretary

W. J. Barbour,
Vice-President-Investments

B. C. Bone,
Vice-President & Associate Treasurer

R. L. Coleman,
Vice-President-Milling

G. H. Corlett,
Vice-President-Business Services

D. Goldman,
Vice-President-Operations-C.C.R.

P. L. Fowler,
Vice-President-Operations-Horne

F. X. Koch,
Vice-President-Engineering & Construction

Camille Marcoux,
Vice-President-Mines, Quebec

B. H. Morrison,
Vice-President-Technology

W. E. Stubbington,
Vice-President-Accounting Services

H. V. Thomson,
Vice-President-Corporate Relations

M. R. Toivanen,
Vice-President-Operations-C.E.Z.

B. H. Grose,
Associate Secretary

L. J. Taylor,
Assistant Secretary

T. E. Phelps,
Assistant Treasurer

L. S. Tigert,
Assistant Treasurer

Chief Officers of Subsidiaries

C. W Halstead
President, Noranda Aluminum

J. P. Fisher,
Chairman, Fraser Inc.

R. L. Henry,
President, Noranda Metal Industries

R. T. Kenny,
President and C.E.O., James Maclaren Industries

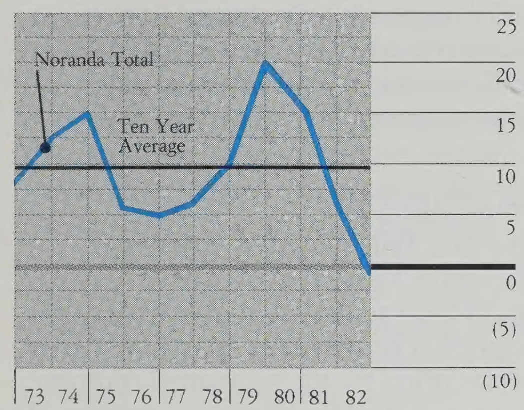
L. E. Londen,
President, Northwood Mills

J. A. Masters,
President, Canadian Hunter Exploration

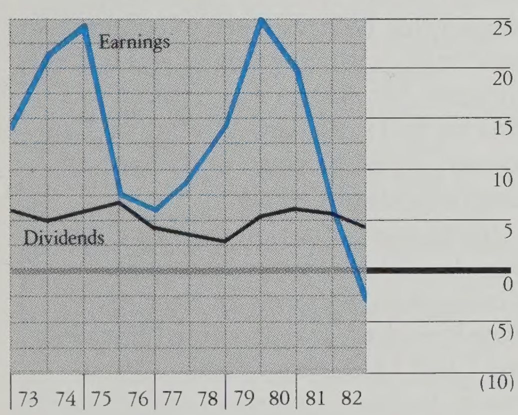
B. T. Ness,
President, Canada Wire and Cable

Directors' Report to the Shareholders

Return on Average Net Assets %



Earnings and Dividends %
(as a percentage of shareholders' equity)



Earnings and Dividends

In what proved to be a devastating year for producers of basic materials, Noranda incurred a loss of $82.9 million during 1982, the first loss in the company's history. Earnings or losses per share from the various divisions were as follows:

Earnings (Losses) Per Share	*Average 1977-81*	*1981*	*1982*
Metals and minerals	$ 1.63	$ .15	$(.18)
Manufacturing	.63	.56	(.12)
Forest products	.57	.20	(.50)
Operating earnings (losses)	$ 2.83	$ .91	$(.80)
Unusual items	.17	.56	.49
Cost of borrowing*	(.40)	(.14)	(.69)
Primary earnings (losses)	$ 2.60	$ 1.33	$(1.00)

*Includes preferred dividends

Dividends on the common shares were reduced to 25¢ per share during the first two quarters and then to 12.5¢ during the final two quarters, for a total of 75¢ per share compared with $1.40 in 1981.

With restrictive monetary policies and unprecedented levels of real interest rates, economic conditions – which were bad enough in 1981 – continued to deteriorate throughout 1982. For primary industry, this resulted in the most dismal market conditions since the early 1930's, and demand and prices for most of the products of the Noranda Group collapsed. At the same time, costs continued to escalate and the combination of high interest rates and mounting borrowings was an added burden.

Adding to the economic difficulties were strikes during the second and third quarters at Canadian Copper Refiners, Canadian Electrolytic Zinc, Canada Wire and Cable and Noranda Metal Industries, which together increased the loss for the year by some 21¢ per share. On the other hand, capital gains of 18¢ per share were recorded. In addition, the sale of U.S. tax credits by Noranda Aluminum and MacMillan Bloedel reduced the year's loss by 49¢ per share and resulted in a nominal overall profit during the final three months.

The quarterly pattern of operating earnings per share before unusual items and borrowing costs was as follows:

Per Share	*Metals & Minerals*	*Manu-facturing*	*Forest Products*	*Total*
First	$(.13)	$ .03	$(.04)	$(.14)
Second	(.33)	(.06)	(.04)	(.43)
Third	(.06)	(.02)	(.13)	(.21)
Fourth	.34	(.07)	(.29)	(.02)
Year	$(.18)	$(.12)	$(.50)	$(.80)

Metals and minerals earnings hit bottom in the second quarter as the result of collapsing prices, which affected both operating earnings and inventory values, and strikes at the metallurgical plants. Even though the strikes continued through most of the third quarter, results improved due to cost control measures and some revival in prices. With the metallurgical plants back in operation, there was a nominal profit in the fourth quarter.

Manufacturing results deteriorated progressively through the year as the aluminum and brass mill markets began to collapse in the second quarter and were joined by wire and cable markets following the summer. The pattern for forest products was similar, as lumber markets remained a disaster while markets for pulp, newsprint and paper continued to erode. Write-downs of certain assets by MacMillan Bloedel added to the fourth quarter loss from operations.

In the circumstances, cost control and cash conservation became the overriding priority. A number of operations were closed for varying periods, capital expenditures were curtailed, salary levels were frozen, wage increases were

moderated, and a determined effort was mounted to increase productivity at all operations. To the extent possible, however, actions that might impair the company's longer range future were avoided, and the tight control of costs should prove beneficial when economic conditions improve.

Many of the actions required involved a severe human cost. Large numbers of employees were affected by layoffs at some point during the year, and in a number of cases their jobs were permanently eliminated. Salaried staff still employed faced an erosion in real incomes, and orders from suppliers of goods and services were slashed. And, of course, dividends to shareholders were substantially reduced. It was very simply a bad year for everyone associated with Noranda. The decisions required involved a great deal of anguish, but they were necessary to ensure the financial integrity and long term health of the company.

Major Developments

Capital expenditures during the year were some $200 million less than originally planned but remained at a very high level, as the result of a decision to complete a number of major projects begun in previous years. Major projects virtually completed during the year included the Goldstream and Grey Eagle mine developments, the metallurgical improvement programs at the Horne smelter and Canadian Electrolytic Zinc, the major expansions at Noranda Aluminum and Northwood Pulp, Canada Wire's continuous cast rod mill, the first stage modernization of Maclaren's newsprint mill, and the expansion of MacMillan Bloedel's linerboard mill in Alabama. Placer Development's 34%-owned silver property in Mexico was placed in production, and development of its gold deposit in Montana was virtually completed.

Modernization of Fraser's pulp mill at Atholville, N.B. continued throughout the year, and this project should be largely completed during the first half of 1983. The start of construction on the previously announced zinc reduction plant at Belledune, N.B. was deferred. The only major project started during 1982 was a mandated $72 million environmental improvement program at Maclaren's pulp mill.

In November, an agreement was reached under which Noranda can earn a 50% direct interest in certain mining properties near Hemlo, in northwestern Ontario, in return for placing them in production. Previous drilling had indicated the presence of an economic gold deposit on these properties, and subsequent work has substantially enlarged the ore reserve.

Financial Position

Capital expenditures during 1982 were $706 million. Of this amount, $116 million were routine expenditures for improved efficiency, environmental control and maintenance of production. The balance of $590 million comprised expenditures on the various major projects, the largest items being the expansion at Noranda Aluminum and the modernization of Fraser's Atholville pulp mill. In addition, capital expenditures by affiliated companies totalled $400 million.

Reflecting the heavy capital expenditures, continued dividends and operating losses, total short and long term debt rose by $740 million during the year. This was all term debt, and net working capital increased by $175 million. Noranda was fortunate in that it entered 1982 in very strong financial condition and, while this has obviously been eroded to some extent, the current situation is not a cause for concern. With the completion of most of the major projects begun prior to 1982, capital spending will be substantially lower in 1983. In addition, the company and its subsidiaries have very large unused lines of credit and, since the year end, a $140 million issue of 7 year floating rate debentures has been placed privately.

Organization

In April, William James resigned as Executive Vice-President and as a Director to become President of Falconbridge Limited. The Directors record their great appreciation for the substantial contributions made by Mr. James as a member of the Board since 1968 and as Executive Vice-President since 1974, and are pleased that he has agreed to continue an association with Noranda as an Honorary Director. Mr. James was replaced as a director by H. Richard Whittall of Vancouver, Vice-Chairman of Richardson Greenshields of Canada.

In the reorganization following the departure of Mr. James, Adam H. Zimmerman, formerly an Executive Vice-President, was appointed President and Chief Operating Officer. Alfred Powis, formerly Chairman and President, became Chairman and Chief Executive Officer. Metals and minerals operations were placed under Senior Vice-President J. A. Hall and four Group Vice-Presidents: William Allan, A. G. Balogh, J. M. Gordon and J. C. White.

General Business Environment

For most elements of the resource industries, the current recession is really a depression, with conditions worse than anything since the early 1930's and perhaps the worst ever. In constant dollars prices for many products in 1982 were lower than at any time since the 1930's, and in some cases constant dollar prices approached the lowest point in records that go back over 100 years. At

the same time, the cost of many inputs - particularly energy and labour - continued to increase in Canada more rapidly than the rate of inflation. The inevitable result has been losses of unprecedented proportions throughout the world's non-energy resource sector.

Moreover, it now appears that this decade will be characterized by slower real growth interrupted by deeper recessions, a high real cost of money, continuing albeit reduced inflation, interventionist government tendencies, wide currency fluctuations and unstable markets. International competition within the resource industries will be fierce, as competing countries struggle to earn foreign exchange, and only companies that are cost-effective will prosper.

In these circumstances, Canada's competitive position is a matter of real concern. We have been faced with a situation where Canada's inflation rate and cost increases have been higher than those of many of our major competitors. In addition, our industries have been faced with competitive devaluations of the currencies of other resource producing countries. In these circumstances, Canadians simply must come to realize that wage and salary increases that at least keep pace with the cost of living are no longer possible until justified on the basis of substantially improved productivity.

Noranda's objective is to emerge from this period with improved productivity, cooperative employee relations, efficient asset management and effective development and use of new technology. The overriding need is to ensure that Noranda Group operations can continue to compete world-wide. This requires modern plant, which by and large is in place, but above all it requires that employees identify more closely with the company's problems and goals – to ensure that expectations and wage demands are realistic and to enhance productivity. This requires painstaking communications and establishment of a spirit of trust, which is not an easy task given the confrontational nature of collective bargaining. Nevertheless, a concerted effort is being made, and the response to date is encouraging.

Outlook

Producers of most raw materials, at least in the industrialized world, have responded to the combination of high interest rates and extremely depressed demand by curtailing production. As a result, the buildup of inventories to unmanageable levels that has characterized past recessions has not occurred in the case of most Noranda Group products. This argues that demand and prices should respond fairly quickly to improved economic conditions.

Noranda's plans for 1983 and beyond are premised on the consensus economic forecast that lower nominal and real interest rates will permit a sluggish recovery to begin this year, led by a revival in the North American housing and automobile markets. If this is followed by a revival in business capital spending, the recovery would gain strength in 1984-85.

Based on this scenario, it is planned that a number of mines in the Noranda Group will remain closed for all or most of 1983, that the new Noranda Aluminum potline will not start up until later in the year, and that a number of manufacturing and forest products facilities will operate at levels well below capacity. Planned capital expenditures are substantially reduced. However, with many new facilities in place, the Noranda Group will be positioned to respond quickly should the economic forecast prove to be too pessimistic.

The economic conditions assumed for 1983 should result in some improvement in the markets for some Noranda Group products, notably lumber, copper and aluminum. Together with the cost reduction measures in effect and lower interest rates, this should produce a substantial improvement in Noranda's results in 1983, particularly during the second half of the year. However, unless the recovery is stronger than presently expected, results for the year as a whole will still be totally unsatisfactory.

Beyond 1983, the outlook is considerably more cheerful. Noranda's basic position is strong, with a good strategic position in the industries in which it operates, modern and competitive plant and equipment, a number of new facilities that should make an important contribution when conditions improve, and a sound financial structure. The world will continue to need resource products and, after the ravages of recent years, shortages could well develop in the context of a normal economic environment. Looking through the present dismal conditions, we view the future with optimism and confidence.

The past year has been a bad one for everyone associated with Noranda, but particularly for employees at all levels throughout the Group. The Directors wish to thank these employees for their dedicated and highly effective efforts in the face of extremely trying circumstances.

On behalf of the Board,

Alfred Powis

Chairman and Chief Executive Officer.

Toronto, Canada
February 25, 1983

Markets — Resource Products

Metals and Minerals

Non-ferrous metal demand and prices sagged lower in 1982. Inventories climbed as producer cutbacks and closures failed to keep pace with the lessening of industrial production and consumer destocking.

However, as U.S. interest rates dropped in the second half in response to the expanding money supply, inflationary concerns were rekindled resulting in stronger prices for precious metals.

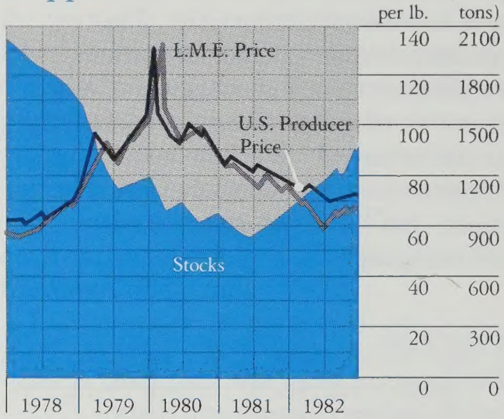
Although the expectation is for a modest consumer-led recovery, the response for industrial commodities and capital goods could well be delayed into 1984.

Noranda Sales markets the production of Noranda's four metals and minerals operating groups as well as those of several other mining companies. The Toronto head office is commercially responsible for North and South America and the Pacific while an United Kingdom subsidiary operates in Western Europe, Africa, the Middle East and the East bloc. Noranda Sales Inc., a US Company, holds a 70% interest in Norcoal Company, a coal trading company in Charleston, West Virginia and a 65% interest in Canadian American Metal Company, a metal trading company in New York.

The UK company owns Rudolf Wolff Group Limited which has subsidiaries in London, New York, Zurich, Frankfurt and Hamburg providing metal and financial futures brokerage services on the London, New York and Chicago exchanges.

Noranda Sales manages a 45% partnership with Eluma S.A. of Sao Paulo in a Brazilian marketing and trading company and Noranda's 50% interest in Nutrite Inc., a Canadian fertilizer distribution company and its US subsidiary Nutrite Corp.

Copper

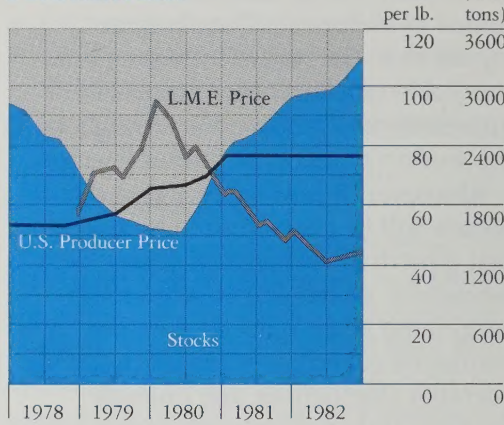


Western World Balance '000 Short Tons	1980	1981	1982
Supply	7,844	8,048	7,867
Demand	8,004	7,972	7,485
Year-end stocks	948	1,024	1,406

North American copper mines reduced production 660,000 tons or 25%. However, consumption was down for the third consecutive year and industry stocks rose to 1.4 million tons. Some reduction will come with economic recovery depending on decisions to restart closed capacity and U.S. industry labour negotiations. London Metal Exchange quotations averaged U.S.67¢ per pound in 1982, the lowest level in real terms since World War II. The year-end price of 68¢ was above the June low of 53¢ but well below economic levels.

Apart from depressed economic conditions, copper markets are suffering from technological change that has eliminated or reduced many applications. It is unlikely prices will rise, in the foreseeable future, to levels justifying major new projects and greater emphasis on product research and market development will be essential if productive capacity is to be utilized.

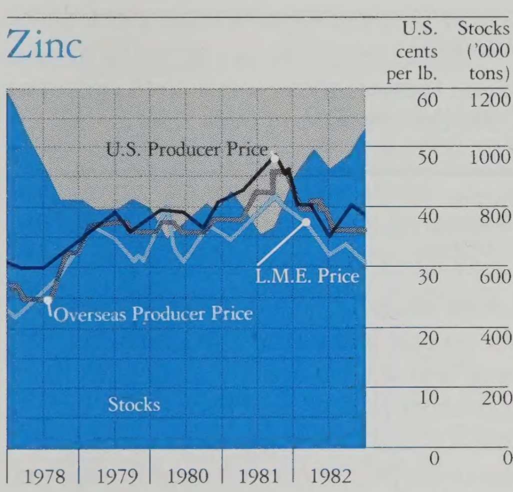
Aluminum



Western World Balance '000 Short Tons	1980	1981	1982
Supply	14,085	13,645	11,960
Demand	13,523	12,988	11,552
Year-end stocks	2,291	2,948	3,356

The 14% rise in western world stocks of aluminum forced significant production cutbacks everywhere. Aluminum prices remained under pressure throughout the year. The London Metal Exchange (which commenced trading aluminum in 1979) was indicative of the market as its quotations reached a low of U.S.43¢ per pound in June compared to published producer quotations of 76¢. Substantial overcapacity for aluminum in 1983 will defer most expansion projects and eliminate several high cost or obsolete operations.

Zinc

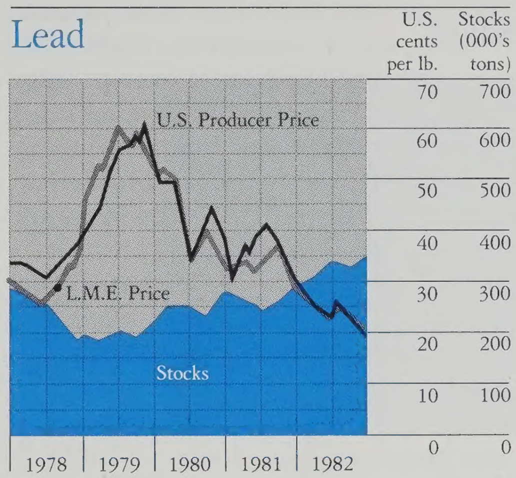


Western World Balance *'000 Short Tons*	*1980*	*1981*	*1982*
Supply	4,939	4,992	4,670
Demand	4,942	4,867	4,520
Year-end stocks	787	912	1,062

A 20% reduction in consumption in North America was the major market factor in 1982. In the absence of major strike losses and with expanded mine production from Canada, Mexico and Australia, mine concentrate was in surplus for the first time in four years. With ample feed, smelters competed aggressively for volume and, as the metal surplus of 150,000 tons developed, markets weakened.

U.S. prices fell from U.S.44¢ per pound in January to 35¢ in April before recovering to 40¢ at mid year. Overseas, the price fell from U.S.$950 per metric ton to $800 by June, where it remained.

Lead

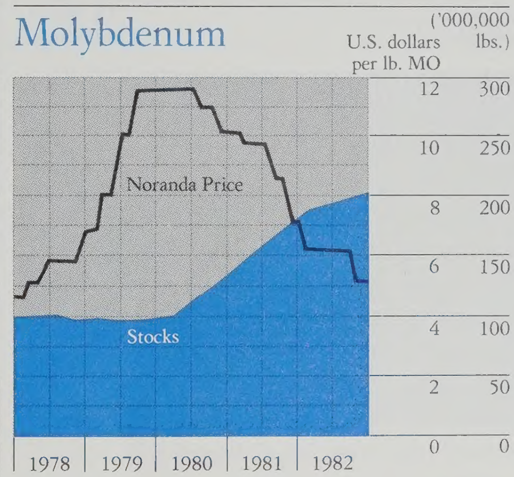


Western World Balance *'000 Short Tons*	*1980*	*1981*	*1982*
Supply	4,394	4,303	4,135
Demand	4,351	4,280	4,070
Year-end stocks	261	284	349

For the third consecutive year, both supply and demand for lead declined while stocks rose. Prices were weak, falling from U.S.31¢ per pound at the beginning to 20¢ at the end of 1982. At these very low price levels, scrap has become less available. Some lead mine and smelter closures have taken place and most remaining operations are sustained by silver or other by-products.

In the longer term, the absence of a third major market to offset reductions arising from smaller automobile batteries and lead-free gasoline, will certainly limit production to the most cost effective producers.

Molybdenum

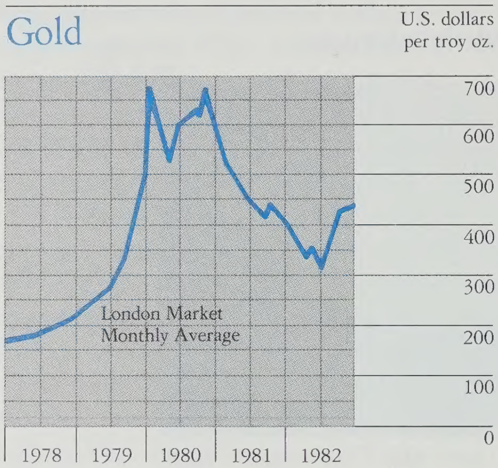


Western World Balance *'000,000 lbs.*	*1980*	*1981*	*1982*
Supply	211	209	159
Demand	176	161	137
Year-end stocks	132	180	202

Molybdenum reflected the circumstances of the steel industry where the operating rates dropped below 40% of capacity in the United States. The start up of mines justified by the high prices in 1979 and 1980 resulted in theoretical mine capacity being double 1982 consumption and triple actual production. Stocks rose further and prices collapsed with merchant quotations below U.S.$3.00 per pound for molybdenum in oxide and producers' prices down from U.S.$6.90 to $5.00.

Consumption will only recover when the recession recedes and capital investment resumes. It should also expand in future with growing demand for stronger lighter alloys; however, it will be several years before the current available capacity is fully utilized.

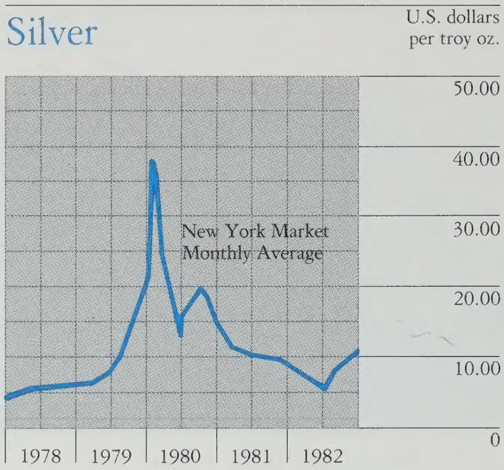
Gold



Western World Balance *'000,000 Troy Ounces*	*1980*	*1981*	*1982*
Supply	25.8	31.7	32.5
Demand	24.0	34.7	32.7
Surplus (deficit)	1.8	(3.0)	(0.2)

The first six months were dominated by the persistent pressure of high real interest rates which outweighed the influence of political crises, central bank purchases and labour unrest in South Africa. Gold prices fell to a low of U.S. $297 in June. Thereafter, concerns over the security of international debts, the growth in U.S. money supply, the expectations of a weaker U.S. dollar and the potential for renewed inflation, combined to reverse the price trend and led to a price of $450 by year-end and over $500 in mid January.

Silver



Western World Balance *'000,000 Troy Ounces*	*1980*	*1981*	*1982*
Supply —			
Primary	269.0	270.0	270.0
Secondary	270.0	148.0	130.0
U.S. Stockpile	—	2.0	—
	539.0	420.0	400.0
Consumption	380.0	383.0	385.0
Surplus	159.0	37.0	15.0

Although influenced by its industrial character, silver behaved much like a monetary metal in 1982. Prices were more volatile than gold but followed a similar pattern, falling to a low of U.S.$4.90 in June and then rising to $11.00 at year-end and over $13.00 in January.

Stocks on the three terminal exchanges trading silver rose by 10% or 13 million ounces during the year. There were no U.S. Government stockpile sales and in December the U.S. Congress approved restrictions limiting sales to 10% of annual U.S. mine production or approximately 4.5 million ounces.

Potash

World Balance *'000 Short Tons K_2O* *Year Ended June 30*	*1980*	*1981*	*1982*
Supply	28,246	30,247	28,901
Demand	28,396	29,370	28,582
Difference	(150)	877	319

Lower usage of potash which started in the second half of the 1981 fertilizer year, was accentuated by reductions in consumer inventories. Faced with low demand and increasing inventories, producers in North America and Europe cut 1982 production to about 75% of capacity for the fertilizer year. The Fall demand in the U.S.A. was down substantially and cut backs in production continued.

The price increase in March to U.S.$1.30 per K_2O unit for coarse grade was offset by increased discounts. In the summer, prices dropped to $1.10 and remained under pressure.

Phosphates

World Balance *'000 Short Tons P_2O_5* *Year Ended June 30*	*1980*	*1981*	*1982*
Supply	36,872	37,048	36,817
Demand	34,260	35,626	34,789
Difference	2,612	1,422	2,028

World phosphate fertilizer consumption declined in part because importing nations were short of foreign exchange. When exporters failed to dispose of surpluses in their domestic markets, prices fell from U.S. $200 metric ton to $175 in the peak season and then to $167 by year end. As a result, supply has again been sharply curtailed in the major producing areas.

Forest Products

1982 was a year of unprecedented weakness in all sectors of the forest products industry. Even those products and markets which have historically followed a different cycle than the general economy were battered by oversupply, intense competition and weak demand. Much of the problem can be traced to the length and severity of the recession and to high interest rates.

Structural problems with the forest products industry itself accentuated the difficulties. Foremost among these was a surge of new capacity as a result of investment decisions made in the late 70's. The capital intensive nature of the industry makes profitability highly sensitive to operating rates and new capacity combined with low demand drove operating rates to historical lows for many products.

In overseas markets, an already weak situation was made worse for North American suppliers by the extraordinary increase in the value of the U.S. dollar vis-à-vis other currencies. The competitive balance between the major forest products supply regions was dramatically altered and in some cases customers faced increasing prices in their domestic currency while North American producers were experiencing drastic declines in their U.S. dollar denominated mill returns.

A partial recovery in solid wood products during the last few weeks of 1982 did show that there is a sound underlying demand for the industry's products once economic conditions, and interest rates in particular are perceived as becoming normal by the consumers.

The Noranda owned and associated forest products companies, with a gross sales value of about $3 billion, are together among the leading world producers of lumber, market pulp, waferboard and newsprint and major producers of plywood, printing and writing papers and linerboards. The geographic distribution of the markets is as follows:

Canada	27%
United States	47
Europe	14
Far East	6
Other	6

The marketing of virtually the whole spectrum of forest products is handled mainly by the operating companies themselves, and in part, centrally through Northwood Mills which is also the holding vehicle for Noranda's interest in the forest products industry.

A global network of sales offices, agencies and distribution centres ensures some market penetration of everything from lumber to high grade printing and writing papers.

Printing and Writing Papers

North American Balance

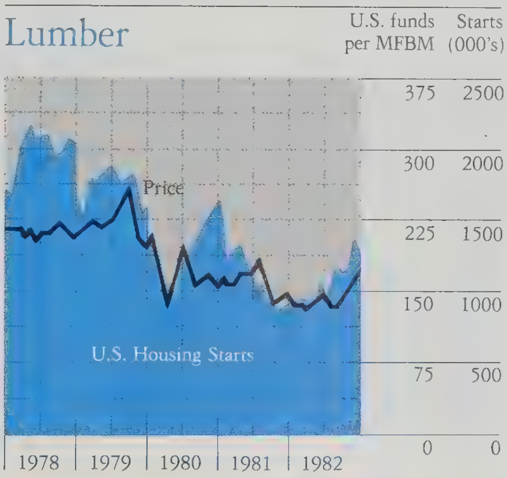
Million Tonnes	*1980*	*1981*	*1982*
Capacity	15.7	15.9	16.5
Shipments	14.0	14.1	13.1
Operating Rate %	91	89	80

The slowdown in retail business in 1982 and the resultant decrease in advertising expenditures caused a reduction in printing and writing paper demand in North America.

By comparison with other forest products, however, printing papers maintained their volume relatively well. Prices in contrast declined sharply as a result of new capacity, and tumbling pulp prices.

Groundwood papers, particularly coated grades used in magazines and commercial printing, outperformed the wood-free grades which lost market share because of their higher cost.

Lumber



	1980	*1981*	*1982*
U.S. Housing Starts (millions)	1.21	1.08	1.06
U.S. Lumber Consumption (billions fbm)	32.6	31.2	29.3

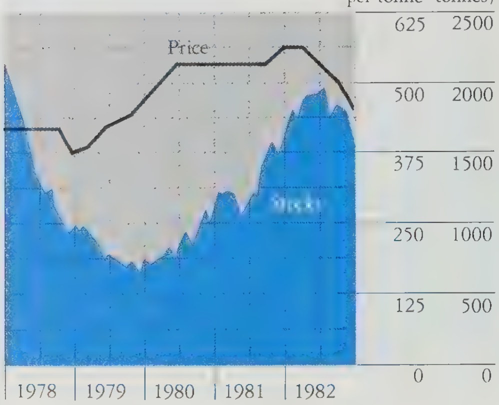
The relationship between interest rates and housing starts explains much of what occurred in the markets for lumber during 1982.

Record high interest rates during the first half choked off residential construction and thus lumber consumption. As interest rates eased in the latter months of the year, wood markets began to improve and after three years of almost constant decline prices moved upward.

Despite the improvement in U.S. housing starts in late 1982 the level remained at just over half of the peak years of the 70's.

Lumber exports to Europe were adversely affected by the strength of the U.S. dollar and by low levels of construction activity. Prices for lumber in the U.S. market were at a historical low for most of the year but recovered strongly during the last few weeks.

Market Pulp



North America and Scandinavia Balance

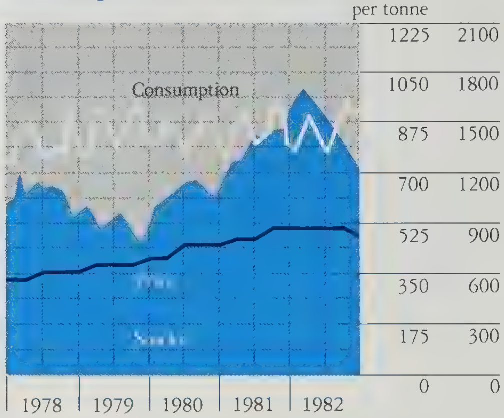
'000 Tonnes	1980	1981	1982
Production	16,090	15,441	13,490
Shipments	15,741	14,967	13,315
Closing Inventory	966	1,425	1,599

Market Pulp – pulp for paper making sold to paper making companies who do not have sufficient integrated supply — experienced one of its worst slumps ever in 1982.

As a marginal fibre supply to the world's paper industry, demand is extremely sensitive to paper mill operating rates and, as these fell, pulp shipments collapsed. Producers' inventories rose sharply during the first half of the year and it was only by severely curtailing production that companies were able to avert further stock accumulation during the second half of 1982.

Pulp prices which had weakened during the latter part of 1981 continued to fall through the year both as a result of the lower demand and in response to major shifts in foreign exchange rates in Europe and Scandinavia. The price of the bellwether bleached softwood kraft grade in the U.S. market fell from the $545 U.S. per tonne to the $450 U.S. level over the year.

Newsprint



U.S. Balance

'000 Tonnes	1980	1981	1982
Consumption	10,088	10,164	10,107
Stocks	1,090	1,477	1,252

Newsprint consumption changes tend to lag overall economic activity and demand in 1982 followed that pattern. Until mid-year consumption and prices held firm, but thereafter the slow-down in newspaper advertising and the high levels of consumer stocks resulted in downward pressure on prices and lower shipments.

New capacity has been installed over the past two years and this increased supply magnified the effect of lower sales on mill operating rates. The Canadian industry produced at 78% of capacity in 1982. This oversupply situation is expected to continue through 1983 with the result that industry profitability may remain depressed.

The U.S. list price for newsprint was $500 U.S. per tonne at the beginning of 1982, but ended the year at $460 U.S.

Paperboard

North American Balance

'000 Tonnes	1980	1981	1982
Capacity	33,206	33,729	34,855
Demand	30,369	30,626	29,134

Includes containerboard, boxboard and solid bleached board.

The slowdown in industrial production during 1982 and the consequent lower requirement for packaging materials resulted in significantly lower consumption for linerboard, corrugating medium and boxboard. The decline in consumption was accompanied by a major reduction of inventories with the result that both converters and producers suffer very low shipment levels.

In Canada, mill sales of paperboard were extremely low as a result of long strikes at Eastern Canadian converting operations. Export markets offered no relief as prices slumped in Europe, Japan and the Far East.

In North America discounting from list prices was widespread and the list prices themselves fell from $330 to $298/tonne for linerboard.

Exploration

Metals and Minerals

Noranda Exploration, based in Toronto, continued its world-wide search for viable mineral deposits from 39 offices. The main thrust continued in Canada from 17 field offices and, to a lesser extent, 11 operating centres in the United States and 4 in Australia. Exploration continued in other countries but at a diminishing level.

An increased effort was placed on the search for precious metal deposits and this will continue in 1983.

In Canada, the activities of wholly owned Mattagami Lake Exploration Limited were merged with those of Noranda Exploration Company, Limited. A total of 217 projects were active in the two Territories and eight of the ten provinces. 75 of the more important projects were tested for a total of 242,500 ft. by diamond drilling for the most part and by other methods to a lesser extent.

$2.1 million was expended in the Maritime Provinces on base metals, precious metals, potash and tin exploration in 20 active projects. Noranda Exploration also managed exploration work on 36 additional base metal projects funded by Brunswick Mining and Smelting Corporation. The most important projects were the Abitibi-Price Inc. (40%) and Noranda (60%) Joint Venture in Central Newfoundland where non-economic base metal mineralization was discovered and the Brunswick (70%) and Sabina Industries Limited (30%) base metal project in northern New Brunswick where encouraging results were encountered.

In Quebec, a total of $3.9 million was spent seeking base and precious metal deposits centered mainly around existing mining camps where Noranda already has considerable processing facilities. Of the active projects in Quebec during 1982, 46 were in the Noranda and Matagami camps representing 66% of the total Quebec expenditures. Five other mining companies contributed to 15 of Noranda's active exploration projects in Quebec as joint venture participants. Noranda's largest exploration programs in this province are in the deep structural diamond drill testing of the favourable volcanic stratigraphy of the Noranda Area where encouraging results have been encountered.

Expenditure — 1982	*Base Metals*	*Precious Metals*	*Other Commodities*	*Total*
				($ millions)
Canada	11.9	7.8	3.1	22.8
United States	3.7	7.8	1.5	13.0
Australia	1.5	0.6	0.3	2.4
Other	1.4	0.1	0.0	1.5
	18.5	16.3	4.9	39.7

Employees	*1981*	*1982*
Canada	158	168
International	198	139

In Ontario, $5.4 million was expended on 60 active base metal and precious metal projects. The main emphasis was on gold exploration in the Timmins-Kirkland Lake, Wawa, Hemlo, Shebandowan and Red Lake mining camps where large land positions have been accumulated. Base metal exploration was carried out in the Timmins, Schreiber and Sturgeon Lake areas. Late in 1982, Noranda Exploration acquired an interest in a major new gold discovery in the Hemlo Area from Golden Sceptre Mines Limited and Goliath Gold Mines Limited. Additional properties acquired earlier in

the Hemlo area leave Noranda with a total interest in 44,360 acres in this important new gold camp.

$1.0 million was spent in the Prairie Provinces on 8 active base metal, precious metal and uranium projects. The latter commodity accounted for 75% of the expenditures, representing Noranda's previous commitments with joint venture partners in the search for uranium mineralization in the Athabaska basin. Additional reserves were outlined at the Eagle Point, Collins Bay property, shared equally with Eldor Mines Limited and the Saskatchewan Mining Development Corporation. At Martin Lake, low grade uranium mineralization was discovered in joint venture with the Central Electricity and Generating Board and the Saskatchewan Mining Development Corporation.

In the Northwest Territories, $2.2 million was expended on 16 active base metal, precious metal and uranium projects. Exploration was for base metals in the northern Slave province for precious metals in the Yellowknife region and for uranium mineralization in the Dubawnt Lake Sandstone basin. Most of these activities were in joint venture with other mining companies. Additional sub-economic base metal tonnages were outlined at Olga Lake in joint venture with Kidd Creek Mines Limited.

In the Cordillera geological province consisting of British Columbia and the Yukon Territory a total of $5.2 million was expended on 48 active base metal, precious metal, tin and tungsten projects. In the Yukon, encouraging tungsten values were encountered in diamond

drilling near Dawson. In British Columbia, more emphasis was placed on gold exploration and on two important gold properties currently held by Blackdome Exploration Ltd. near Williams Lake and Kettle River Resources Ltd. near Greenwood. Favourable results are being encountered.

Exploration and development programs in the U.S.A. resulted in the expenditure of $13.0 million in the search for base metals, precious metals and mineralization on 93 active projects. Sub-surface drill testing totalling 96,400 feet was carried out on 26 of the more interesting projects and on 4 of these, encouraging mineralization was found. In Maine and New Hampshire, important base metal targets were outlined for further testing while in eleven Western States and Alaska, precious metals and ferro alloys as well as base metals, received prime attention. In Alaska, significant gold mineralization was encountered in diamond drilling at Greens Creek while at the Mud Creek placer gold project reserves are being developed in the permafrozen gravels. Noranda's 50% owned gold property at Goldfield, Nevada is dormant awaiting more favourable economic conditions. Similarly the cobalt-copper mineral inventory at the Blackbird Mine in Idaho is not presently economical.

In Australia, Noranda maintained an active program from its head exploration office at Sydney and field offices at Perth in Western Australia, Bathurst in New South Wales and Townsville in Queensland. 46 projects were active in the search for economical base and precious metal deposits; 11 of which were tested at depth by sub-surface drilling methods totalling 36,200 feet. $2.4 million was expended in Australia with base metals receiving the most attention. However, precious metal exploration is becoming more important since mines in Australia are tax exempt where gold dominates production revenue. Very encouraging results were received in the Charter's Towers gold district from the Mount Leyshon gold prospect which is being jointly explored with Marathon Petroleum Australia Limited.

Noranda's exploration offices in Europe were closed. However, joint venture partners continued to test Noranda's lead-zinc deposits in southern Ireland near Harberton Bridge. In Spain, Noranda continued its participation in the Iberian Exploration Syndicate. Expenditures in Europe totalled $0.7 million and in Central and South America, $0.8 million was spent mainly evaluating promising prospects.

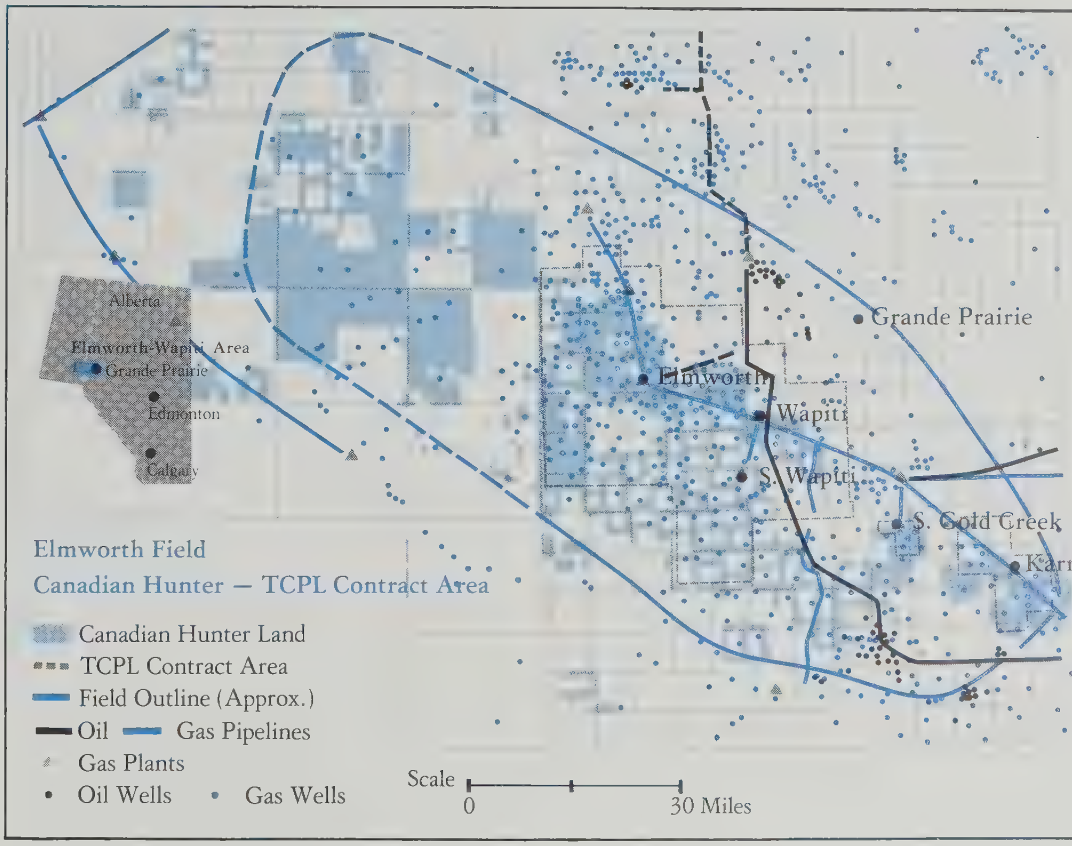
Oil And Gas

Canadian Hunter Joint Venture (75%)

Financial — $ millions	*1981*	*1982*
Noranda's share		
Sales	84.2	86.6
Operating profit	34.8	24.7
Average net assets employed	284.3	321.3
Employees	172	186

The company established itself as the 17th largest gas producer in Canada during 1981 and it is expected at least to maintain that position in spite of a 4% decline in average daily gas production in 1982. The industry experienced another year of continued softening in gas markets as a result of generally mild weather, recession, conservation and price competition. Purchaser nominations for gas from the major contract areas at Elmworth and Wapiti averaged only 62% of the contracted quantities. Hopefully, the joint industry and governments gas marketing initiatives started during the year will have a positive impact on solving the serious problems of shut-in and underutilized capacity in the industry in the medium term.

Gas processing and gathering capacity in the Deep Basin area were substantially increased during the year. New and expanded facilities were required to service new competitor gas contracts and to meet the anticipated increased production for existing contracts resulting from the reserve redeterminations initiated late in the year. The following summarizes the installed sales gas capacity at the five Hunter interest processing plants in the Deep Basin:



Location	*Operator*	*Capacity*	*Noranda's Share*
		MMcf per day	
Elmworth	Hunter	450	199
Wapiti	Sulpetro	125	34
South Wapiti	Amoco	300	44
South Gold Creek	Hunter	15	2
Karr	Hunter	50	6
		940	285

Hunter and Sulpetro applied to the Alberta Energy Resources Conservation Board for approval of ethane and heavier liquids extraction facilities at both Elmworth and Wapiti. The ERCB found these field extraction facilities to be in the public interest and issued conditional approvals in January, 1983. Final approval has been deferred for up to six months to provide an opportunity for serious negotiations of alternative arrangements. The initial scope of these projects will recover 25,000 barrels per day of natural gas liquids by mid-1985. Noranda's share of these liquids will be 9,200 barrels per day.

Industry drilling activity in Western Canada declined 22% relative to 1981. The company's drilling activity was down 47%. Canadian Hunter participated in 40 exploratory and development wells, resulting in 13 oil wells, 24 gas wells and 3 abandonments.

Exploration activity was focused primarily on lands currently held in the Deep Basin area of Alberta and British Columbia. Quality hydrocarbon opportunities continue to be recognized from the accumulating data base in the area. Improved gas marketing prospects would accelerate exploration and development.

Land acquisition at Alberta and British Columbia Crown sales totalled 44,433

net acres compared to 28,240 a year earlier. Hunter's land position at year end was:

	Gross Acres	Net Acres
Leases	2,021,550	916,335
Licences and Permits*	7,145,960	6,890,475
Total	9,167,510	7,806,810

* Includes 6,441,400 gross and net acres in the Nechako Basin, British Columbia.

Noranda's share of remaining reserves at year-end (before royalty interest) is as follows:

	Oil and Natural Gas Liquids (millions of barrels)	Marketable Natural Gas (billions of cubic feet)
Proven	4.6	1,008
Probable	2.7	646
Proven and Probable	7.3	1,654
Established	5.9	1,332

Proven reserves are volumes that are considered recoverable with a high degree of certainty under anticipated operating and economic conditions. Proven reserves may be assigned to both developed and undeveloped lands.

Probable reserves are volumes that may be recovered from lands in the vicinity of proven reserves but where there is some degree of geological, engineering, operational or economic risk.

Established reserves are those reserves recoverable under current technology and present and anticipated economic conditions, specifically proven by drilling, testing or production, plus that judgement portion of contiguous recoverable probable reserves that are interpreted to exist with reasonable certainty from geological, geophysical or similar subsurface information.

Total 1982 expenditures for Canadian Hunter joint venture participants were as follows:

	Land Acquisition & Exploration	Oil & Gas Development	Total
			($ millions)
Noranda	17.1	22.7	39.8
Petromark	2.2	5.0	7.2
Agnew	2.4	3.4	5.8
Domtar	.9	1.1	2.0
Total	22.6	32.2	54.8

Noranda's gross investment since 1973 has been $309 million. Its share of net revenue from production operations over the period has been $156 million, with a resulting net investment at the end of 1982 of $153 million.

American Hunter Joint Venture (82.5%)

The company's exploration activities concentrated on the identification of significant play opportunities and the completion of land assemblies. Evaluations of major prospects with geophysics and drilling were deferred to 1983. The land position at year-end was:

	Gross Acres	Net Acres
Fee	2,353,215	1,297,795
Federal/State	308,498	220,972
Total	2,661,713	1,517,767

This land is distributed mainly in five major play areas.

American Hunter participated in the drilling of 12 wells, resulting in two gas wells, six oil wells and four abandonments. The net daily joint venture production for the year averaged 475 barrels of oil and gas liquids and 0.15 million cubic feet of sales gas.

Total 1982 expenditures for American Hunter joint venture participants were as follows:

	(U.S. $ million)
American Hunter (89.69%)	68.0
Keradamex Inc. (6.56%)	5.0
Bluesky (0.00%)	0.0
Domtar Inc. (3.75%)	3.0
Total	76.0

The target for 1983, in response to decreased competitive conditions in the U.S., permitting slower, less costly land acquisitions, is to evaluate plays with seismic and drilling while holding land expenditures to a minimum.

Noranda's gross investment to date has been U.S. $136 million. Net revenue from production operations has been $4 million. The resulting net investment at the end of 1982 amounted to $132 million.

Panarctic Oils (3.5%)

Panarctic drilled four minor working interest wells offshore of the Arctic Island during the year. No significant hydrocarbons were encountered in the two exploratory wildcats at Sculpin and Cape Mamen. Two exploratory delineation wells at Whitefish and Cisco provided essential data for reserve potential estimates adjacent to these recent discoveries.

A deep onshore exploration test on Melville Island and an offshore delineation test at Cisco are drilling at year-end. Noranda's investment to date has been $10.1 million.

Environmental Control

Noranda Group environmental control activities in 1982 concentrated on the application of modern controls at all sites. In all cases, it is a priority to reach the control levels possible with best available technology or that necessary to meet permit levels or both. For example, an agreement was entered into with Société Nationale de l'Amiante de Québec to pilot a proprietary process for removal of sulphur dioxide from the Horne Division smelter gas using asbestos mine tailings. The experimental work was completed in November. However, preliminary data indicate that original expectations for the process have not been met.

In early June, an unpredictable mechanical failure at the Mines Gaspé sulphuric acid loadout station spilled 3,500 tons of acid into the York River drainage. Quick application of neutralizing agents maintained near neutral pH levels. However, heavy metals, mainly copper were at higher levels than normal for about a month. Joint studies by Mines Gaspé and the Quebec Ministry of Environment indicate that 19% of smolt production was lost in 1982 but because of the quick effective remedy, the affected parts of the river are recovering rapidly.

Major environmental improvements in the Group include:

– a landfill site for the disposal of clarifier sludge from manufacturing operations of Fraser Paper.

– two high efficiency venturi scrubbers installed at the CCR silver refinery to reduce selenium emissions.

– the waste water pollution control facility at Brunswick Mining and Smelting (Smelting Division) commissioned in November 1980 is recovering between 97 and 99% of lead, zinc and cadmium previously discharged to the Belledune harbour.

– James Maclaren Industries completed its conversion to ultra high yield sulphite at the Masson newsprint mill which will reduce the effluent biological oxidation demand well below permit levels.

Revegetation of mill tailings at Noranda Group mine sites presents a formidable technical and financial commitment over the long term since extremely fine tailings are so vulnerable to erosion. Nevertheless, real progress is evident in this costly endeavour.

Expenditures for air and water effluent controls, industrial hygiene, waste disposal and central environmental research totalled $108 million in 1982 and $64 million in 1981.

Noranda Research Centre

The need to develop new mining systems and methods which will significantly increase productivity over the long term has been recognized by the creation of a new mining technology division at the Research Centre. The task of this group is to develop more economical ways to break and move rock safely and to apply emerging technologies such as computer assisted design to mine planning.

Process research in support of metallurgical operations resulted in several new developments. A novel process for copper electrowinning was successfully piloted at Mines Gaspé. This may offer a feasible method for the recovery of copper at the Gaspé oxide plant. The impounded residues from the early operations at Canadian Electrolytic Zinc contain a significant reserve of zinc which may be recovered by a newly developed extraction method. Promising results were obtained in pilot tests of a new method for removing impurities from lead bullion at the smelter of Brunswick Mining and Smelting.

In the manufacturing sector, development work continued on a new wire rope product for Wire Rope Industries, an improved method for fabricating thermal breaks in aluminum windows for Norandex, and grinding media alloys for Norcast.

The 1.2 megawatt experimental hydrogen plant built by Electrolyser Inc. at Hydro Quebec's Research Institute at Varennes was commissioned in June. Three commercial-scale Generation I cells developed jointly by Noranda and The Electrolyser Corporation are operating at target performance levels. Discussions are now underway for the construction of a $50 million prototype industrial plant in Canada based on this technology.

At year end, the Research Centre staff totalled 151, of whom 66 are professionals. Total spending was $9.3 million.

Venture Capital

While not having anything to do directly with forest products, Noranda Group's venture capital operations are conducted through the agency of James Maclaren Industries Inc. This is because Maclaren, prior to Noranda's acquisition, had embarked on what proved to be a highly successful venture investing program. This led to the company's significant technology related investments in Mitel, Lumonics, Norpak and other Canadian and U.S. companies.

Simultaneously, Noranda had invested in three venture capital partnerships and it was felt that by centralizing their administration the company could maximize its activities in this respect.

The Maclaren Group became keen to formalize the activity and give it the status of a properly funded distinct enterprise. Accordingly, at the year-end

it was decided to provide a meaningful budget for this industrial exploration activity, albeit elastic, which hopefully will result in a technology orientation for Noranda outside of its existing businesses.

The activities already undertaken by Maclaren, which have required relatively modest funds, have resulted in realized and unrealized gains approximating $70 million. These results form the basis of confidence for this newly organized activity.

Projects

While many new projects were suppressed and most of those in the initial stages were put on hold due to difficult economic conditions, a number of major committed projects were continued towards scheduled completion and start-up.

Major investments included the Northwood Pulp and Timber expansion at Prince George, B.C., MacMillan Bloedel's major capital program on its B.C. base and in Alabama, U.S.A., Fraser's Atholville expansion and conversion, a modernization program at Maclaren, a new potline for Noranda Aluminum, substantial completion of the Goldstream mine at Revelstoke, B.C., start-up of the Grey Eagle Gold Mine in California, a new roaster and acid plant at CEZ, the metallurgical improvement program at the Horne Division which included a 500 tons-per-day oxygen plant, installation of a semi-continuous casting plant at CCR Division, and Canada Wire's continuous casting rod mill in Montreal East and plant rationalization at Leaside.

In addition to these major programs, a number of smaller projects were undertaken as part of an ongoing program to maintain and upgrade existing plant and facilities to improve working conditions, environmental protection and operating efficiencies for cost competitiveness.

Major projects that have been delayed, but maintained in a state of readiness to proceed when warranted, include, the New Brunswick Zinc Plant, the Blackbird Cobalt Mine and the Hopewell Phosphate project.

A Noranda project team has been established to manage and direct work on the Golden Giant gold mining project in the Hemlo region of northwestern Ontario. Work is in progress to design, build and bring into production as quickly as possible a mine and milling facility with a capacity of at least 1,000 tons per day.

Other opportunities, both for new projects and for expansion or modernization of existing facilities are constantly being evaluated as part of an ongoing program to develop an inventory of projects to be implemented when circumstances permit.

Capital Spending on Projects in 1982	$ 920 million
Target Completed Value of Projects Worked on	$2,574 million
Approximate Number of Construction Jobs Provided Directly in the Field	3,300 Man Years

As a fallout from the management reorganization, the Corporate Purchasing function was assigned to the newly designated Vice President Engineering & Procurement. To put some perspective on this assignment, it is worth noting that the cost of materials, equipment and related services in the Noranda Group is a major component of production cost.

During 1982, purchased materials, equipment and services for the various operations cost in excess of $1,200 million; of which, some 90% was supplied through companies in Canada. In addition, over $250 million was spent on equipment, materials and construction services for capital projects and another $300 million on energy inputs.

To provide security for the suppliers and Noranda, procurement is carried out in a manner that ensures goods and services are obtained on a fair and competitive basis, consistent with suitability, price, delivery and long term security of supply.

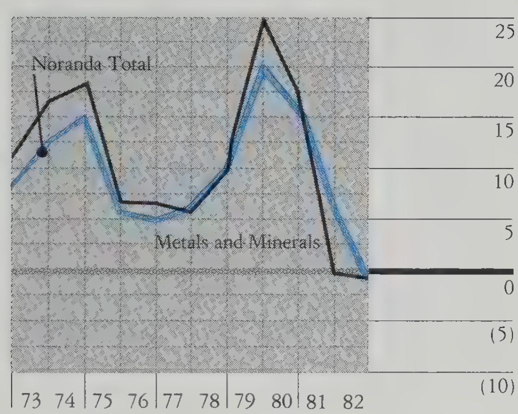
Safety

In keeping with its commitment to accident prevention as articulated in the 1981 report as well as the belief that good operations are safe operations, the following summarizes the safety record of the main components in the group. Frequencies shown are the number of lost time accidents per million hours worked.

Metals and Minerals	*1980*	*1981*	*1982*
Hours Worked (000)	24,403	27,903	23,088
Frequencies	27.8	32.9	30.8
Manufacturing	*1980*	*1981*	*1982*
Hours Worked (000)	12,353	13,145	12,718
Frequencies	68.3	56.9	50.3
Forest Products	*1980*	*1981*	*1982*
Hours Worked (000)	59,177	53,202	42.484
Frequencies	24.8	26.0	27.2

Metals and Minerals

Return on Average Net Assets %



It is clear that 1982 was a year which the company survived because of the strong financial position it enjoyed on entry and the response of all concerned to conditions which had not been experienced since the great depression. In the Metals and Minerals Group, results were affected adversely by the combination of extremely depressed markets, some low grade operations, continued excessive wage adjustments arising from earlier contracts and some work stoppages.

Producers in Africa and South America have been selling volumes of metals for their foreign exchange value regardless of the cost of production. As a result those countries maintained full production and an increasing share of world output to satisfy their desperate needs for debt service money. Thus, the companies in market economies suffered limited operations. Prices of the principal base metal products – copper, zinc, lead, molybdenum – were at virtual record lows and in no case did they provide fully for the cost of their production. It was only those mines which had by-product metals like silver and gold, that the revenues for the principal metal were fortified sufficiently to pay for the cost of their production. Consequently, during the year, mine operations were suspended at the Babine Division, Boss Mountain and Gaspé, as well as Pamour No. 2 and Schumacher. In addition, extended shutdowns at Brenda, Mattabi and Lyon Lake were arranged.

Total sales were $1,550.9 million against $1,766.7 in 1981. The operating profit (i.e. earnings after tax, but before interest, exploration expense and unusual items) was $5.9 million compared to $47.3 in 1981.

Total Financial — *$ millions*	*1981*	*1982*
100% Basis		
Sales	1,766.7	1,550.9
Average net assets employed	2,461.3	3.099.7
Noranda's Share		
Sales	1,382.2	1,189.8
Average net assets employed	1,481.1	1,761,9
Operating profit	47.3	5.9
Employees – Canada	17,500	13,400
– International	8,200	7,100

Even with these considerable losses the company maintained its mineral exploration activity.

As was outlined at the annual meeting in 1982, the metals and minerals group was reorganized into four principal operations. Mines are where they are found and therefore, while these groupings are somewhat logical, they are not entirely symmetrical. For internal purposes, the groups are referred to by Greek letters, the key to which is as follows: Alpha – Western Canada and the United States; Beta – Copper and related; Delta – Zinc and related; Gamma – Ontario mines and industrial minerals. These groups are organizing in such a way that they may operate as free-standing mining companies and it is expected that as this mode of operation

Mine Production

		1981 Ore Treated (000 tons)	**1982 Ore Treated (000 tons)**	Copper (tons)	Zinc (tons)	Lead (tons)	Silver (000 oz.)	Gold (oz.)	Molyb-denum (000 lbs.)	Muriate of Potash (000 tons)
Beta	*Gaspé	11,156	**6,489**	53,780	—	—	—	—	926	—
Delta	Brunswick	3,765	**3,997**	6,200	286,700	98,500	7,014	—	—	—
	Heath Steele	1,378	**1,542**	9,900	47,000	11,000	1,239	6,730	—	—
	Mattagami	1,327	**1,299**	10,600	7,600	—	211	4,800	—	—
	Chadbourne	255	**309**	—	—	—	—	25,300	—	—
	Gallen	38	**111**	—	4,000	—	28	1,350	—	—
Gamma	Geco	1,466	**1,489**	21,840	44,150	480	1,345	—	—	—
	Lyon Lake	359	**261**	1,260	17,450	870	749	—	—	—
	F-Group	108	**161**	670	13,870	240	141	—	—	—
	Mattabi	521	**414**	870	22,920	1,420	911	—	—	—
	Pamour	1,758	**1,637**	350	—	—	50	119,520	—	—
Alpha	*Babine — Bell	5,985	**3,720**	11,450	—	—	30	11,200	—	—
	— Granisle	4,225	**2,073**	6,970	—	—	31	3,870	—	—
	*Boss Mountain	468	**445**	—	—	—	—	—	1,189	—
	Brenda	11,243	**10,455**	11,500	—	—	166	—	5,405	—
	Central Canada Potash	3,406	**1,821**	—	—	—	—	—	—	689
	Noranda Lakeshore	1,767	**1,668**	22,800	—	—	—	—	—	—
	Northland Gold	—	**—**	—	—	—	—	2,850	—	—
Other Associates	Craigmont	1,536	**342**	2,850	—	—	—	—	—	—
	**Kerr-Addison	882	**662**	—	8,680	5,680	—	54,610	—	—
	***Placer	39,311	**31,673**	82,500	—	—	6,937	29,664	4,413	—
	Tara	1,180	**1,961**	—	166,400	29,600	—	—	—	—
	Totals			243,540	618,770	147,790	18,852	259,894	11,933	689
	Noranda's Direct Interest			162,900	401,380	89,640	7,420	131,990	6,060	689

*Mining operations suspended **Includes Mogul of Ireland ***Includes Endako, Equity, Gibraltar and Marcopper

Smelting and Refining Production

		Copper (tons)	Zinc (tons)	Lead (tons)	Silver (000 oz.)	Gold (oz.)	Cadmium (lbs.)	Sulphuric Acid (tons)
Beta	Horne Smelter	234,000	—	—	—	—	—	—
	Gaspe Smelter	54,000	—	—	—	—	—	117,000
	C.C.R. Refinery	267,000	—	—	14,226	364,000	—	—
Delta	Brunswick Smelter	—	—	67,000	3,175	—	—	197,000
	Canadian Electrolytic Zinc	—	161,000	—	—	—	508,000	197,200

Operations

Legend

Cu	copper	Au	gold
Zn	zinc	Mo	molybdenum
Pb	lead	K_2O	potassium oxide
Ag	silver	o.p.t.	ounces per ton

becomes digested, the respective Group Vice Presidents will start to initiate the divestiture and acquisition of properties, as is appropriate to the conduct of the business of their group.

Exploration is conducted by two main organizations. Noranda Exploration Limited performs the work in Canada and the world, excluding the United States where Noranda Exploration, Inc. carries out the work. The mandate of these companies is to provide primary service to the four mining groups and the bulk of the budget is now devoted to high potential areas near existing centres of operation. As well, particular emphasis is being given to precious metals.

Worldwide reconnaissance was reduced and the company's activities were largely restricted to Canada, United States and Australia. In Canada, this policy was rewarded with the option to participate to the extent of 50% in a major gold discovery in the Hemlo area of Ontario.

In view of the change in reporting to reflect the re-organization the undernoted table is provided for comparison between 1981 and 1982 results.

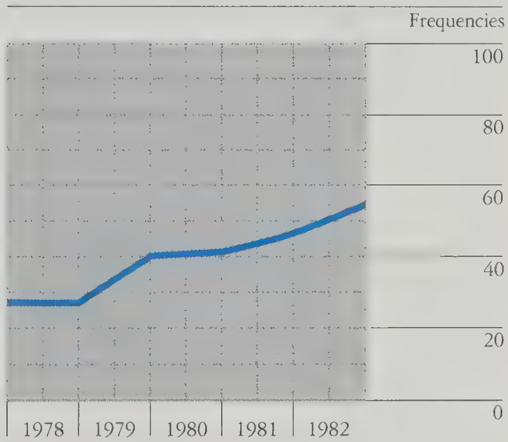
*Operating profit - *$ millions*	*1981*	*1982*
Copper group	22.7	12.6
Zinc group	10.6	(5.6)
Other mining	(1.8)	(13.4)
Major subsidiaries and associates	15.8	12.3
	47.3	5.9
Oil and gas	34.8	24.7
Total	82.1	30.6

*After taxes, but before exploration expense, cost of borrowing and unusual items.

Beta Group

Financial - *$ millions*	*1981*	*1982*
Sales	328.3	279.9
Average net assets employed	226.1	266.1
Employees	4,405	3,113

Safety	*1980*	*1981*	*1982*
Hours Worked (000)	7,774	8,340	6,461
Frequencies	40.1	46.6	54.1



Horne Division

Smelter Production	*1980*	*1981*	*1982*
Materials Smelted (Excludes Flux)			*(000) Tons*
Noranda	183	234	211
Custom	741	645	746
Cu Content of Anodes Produced	221	214	234

Receipts of concentrates were down 74,200 tons from the preceding year as custom shippers curtailed mine production due to depressed copper prices. Concentrate inventories, which had been high at the end of 1981, were reduced by 69,750 tons to normal levels.

Record quantities of scrap and secondaries were smelted in 1982. These materials, some of which displace sulphur bearing concentrates, will become an increasingly important part of the feed

if traditional mining sources continue to dwindle in the next few years.

The $35 million smelter modernization project, which commenced in 1980, was completed two months ahead of schedule and well under budget. Benefits are being realized from reduced dust emissions, improved productivity and energy efficiency.

Cost management and training programs designed to increase employee involvement at all levels are effecting a positive change in operations

Division Mines Gaspé

Smelter Production	*1980*	*1981*	*1982*
Concentrate Smelted			*(000) Tons*
Gaspé	207	192	118
Custom	86	108	111
Production			
Copper	69	71	54
Acid	149	110	117

In response to continuing losses, Mines Gaspé finally suspended all mining and milling on December 18, 1982.

Notwithstanding an 1,100 man reduction, the work force achieved impressive gains in productivity, cost reduction and metal recoveries.

As long as concentrate can be purchased, the smelter will continue to operate. The oxide leaching plant was extensively modified and will resume operation when the Needle Mountain mine is re-activated.

Underground diamond drilling below the town of Murdochville continues to outline the deposit indicated by a 1979-1982 surface drill program. Closely spaced drilling during the year identified about three million tons of mineralization grading 2.2% Cu. Widespaced drilling intersections indicate an additional seven million tons of similar grade. It is expected that more mineralization will be identified. The future of the operation depends on this new ore development as much as it does on prices, productivity and new capital costs.

CCR Division

Refined Metal Production	*1980*	*1981*	*1982*
Copper (000-tons)	410	396	267
Silver (000-oz.)	22,055	18,996	14,226
Gold (000-oz.)	475	465	364

Refinery throughput was reduced by some 120,000 tons of copper due to a four month strike which was settled on August 29, 1982. Since copper production at the smelters was unaffected, inventory of unrefined anodes rose to unprecedented levels, and stocks will permit capacity operation until at least mid-1983 despite planned cutbacks at mining and smelting operations.

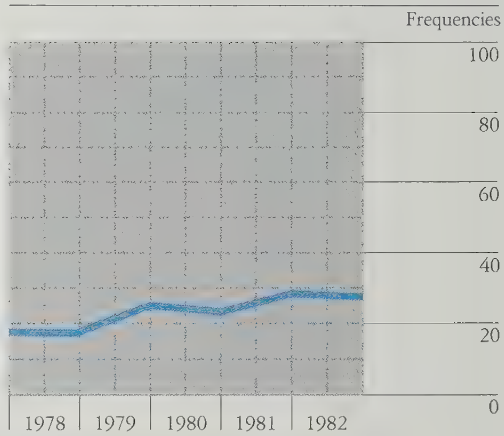
A $7.4 million program is underway to mechanize handling and processing equipment which will eliminate many hazardous jobs and improve productivity. In addition, new facilities to treat precious metal slimes and to enlarge the range of high purity selenium alloys have been installed.

The organizational structure was extensively modified at the end of 1982 reducing supervisory levels from seven to four and establishing three new functional areas. This is expected to improve communications, effect a downward transition of responsibilities, and result in an organization more responsive to change.

Delta Group

Financial - *$ millions*	*1981*	*1982*
100% Basis		
Sales	553.1	513.8
Average net assets employed	546.3	580.1
Noranda's Share		
Sales	513.8	452.7
Average net assets employed	422.8	465.7
Employees	4,485	4,363

Safety	*1980*	*1981*	*1982*
Hours Worked (000)	7,455	9,340	8,700
Frequencies	23.7	29.8	28.0



Canadian Electrolytic Zinc

(90.2% direct; 4.9% indirect)

Production	*1980*	*1981*	*1982*
Zinc (000-tons)	229	225	161
Cadmium (000-lbs.)	881	709	508
Sulphuric Acid (000-tons)	264	285	197

The plant was shut down for 106 days by a strike which was settled with a new collective agreement expiring on July 31, 1984. Metal output for the balance of the year averaged 94% of capacity. Slab zinc inventories were at normal working levels at year end.

The third roaster-acid plant, under construction since late 1980, will be operational as scheduled in mid 1983

and within the estimated capital cost. This facility will replace outside custom roasting and will enhance the operation's position in eastern Canadian and north-eastern U.S. sulphuric acid markets.

Matagami Division

At the Mattagami Lake mine it was necessary to change the mining method to suit difficult rock conditions in the central pillars. Extraction progressed satisfactorily and a large blast was successful in the North-South pillar late in the year. The use of dry filtered tailings fill has improved ground control as it permits a speed-up in the sequence of mining.

At Norita attempts to mine the A zone with caving-under-fill methods were not successful and a change to transverse long-hole stoping is underway with production scheduled for late in 1983.

The Orchan mine was closed in 1982 after producing 5 million tons of zinc/copper ore since 1963.

Capital expenditures were $1.5 million.

Les Mines Gallen (50%)

After a difficult start up of the concentrator facilities at the Horne Division, the mine reached commercial production in April, only to be shut down in July because of losses incurred due to low metal prices.

Chadbourne

Backfilling of mined out stopes was commenced in preparation for mining pillar ore. Ore reserves are sufficient for two years at present production rates. Investigation of several small lenses of gold-bearing material is being carried out at the sites of the old Horne and Quemont mines.

Heath Steele Mines

Little River Joint Venture

(75% owned by Heath Steele)
Mill throughput was 4,225 tons per calendar day compared to 3,775 tons in 1981. The recovery of metal in concentrates improved significantly in the second half of the year, in spite of lower head grades. However, this good performance and a 7% reduction in operating costs were insufficient to offset much lower metal prices which caused serious cash losses. The decision to suspend operations until prices improve was deferred six months to April 1983 at the request of the New Brunswick Government.

Capital expenditures were curtailed and consisted mainly of essential work to maintain safe, efficient operations.

Brunswick Mining and Smelting (64.1%)

Operating profit - *$ millions*	*1981*	*1982*
Noranda's share	19.5	14.6

Mine production averaged a record 10,951 tons per day in 1982 which was the first full year of operation following completion of the project to expand production capacity to 11,000 tons per day. With good ore grade and stable mill recovery, production of concentrates also reached record levels.

Continued employee involvement in cost management was instrumental in keeping operating costs within budget. A hiring freeze was in effect for most of the year.

Exploration drifting was completed below the 2,800 foot level at the number 12 mine where diamond drilling is continuing in efforts to expand known ore reserves.

Smelter production	*1980*	*1981*	*1982*
Lead (000-tons)	49	54	67
Silver (000-oz.)	3,043	3,021	3,175
Sulphuric Acid (000-tons)	158	176	197

At the smelter, conversion to propane firing in the sintering operation resulted in higher sulphur elimination and consequently higher production of sinter. The blast furnace and lead refinery ran well and high maintenance standards provided a record plant availability of 91.2%. Production of lead, dore (silver) and sulphuric acid set new annual records and operating costs were lower than 1981.

The Smelting Division won the New Brunswick safety association award for the fifth consecutive year.

Capital expenditures were $31.3 million.

Mineral Inventories

		Tons 000's 1981	Tons 000's 1982	Grade						
				Cu %	*Zn* %	*Pb* %	*Ag* o.p.t.	*Au* o.p.t.	*Mo* %	K_2O %
Beta	*Gaspe — Needle Mountain — proven	4,185	3,887	1.26	—	—	—	—	0.047	—
	— probable	1,432	1,432	1.29	—	—	—	—	0.100	—
	Copper Mountain									
	Sulphide — proven	38,275	35,008	0.37	—	—	—	—	0.016	—
	— probable	44,540	43,107	0.48	—	—	—	—	0.023	—
	Oxide — proven	23,615	22,968	0.44	—	—	—	—	—	—
Delta	Brunswick	111,005	122,109	0.32	9.10	3.73	2.83	—	—	—
	Heath	30,216	27,372	1.24	4.25	1.41	1.74	—	—	—
	Mattagami — Matagami Lake	5,487	5,000	0.45	5.45	—	0.60	0.01	—	—
	— Norita	2,827	2,519	2.21	3.30	—	0.74	0.02	—	—
	Chadbourne	864	614	—	—	—	—	0.11	—	—
	Gallen	1,772	1,605	—	5.25	—	0.65	0.03	—	—
Gamma	Geco	19,200	17,682	1.81	3.52	—	1.37	—	—	—
	Lyon Lake	2,920	2,385	1.61	9.04	0.93	4.62	—	—	—
	F-Group	205	200	0.80	8.20	0.60	1.80	—	—	—
	Mattabi	5,089	4,080	0.64	7.04	0.78	2.91	—	—	—
	Pamour	3,735	2,700	—	—	—	—	0.10	—	—
Alpha	*Babine — Bell	42,743	39,438	0.52	—	—	—	0.01	—	—
	— Granisle	23,250	15,614	0.44	—	—	—	—	—	—
	*Boss Mountain	5,054	4,632	—	—	—	—	—	0.140	—
	Brenda	131,500	121,000	0.15	—	—	—	—	0.032	—
	Central Canada Potash	559,800	488,700	—	—	—	—	—	—	27.0
	Noranda Lakeshore — Oxide	16,600	15,000	1.18	—	—	—	—	—	—
	Noranda Lakeshore — Sulphide — tactite	8,900	8,900	1.35	—	—	—	—	—	—
	porphyry	41,000	41,000	0.65	—	—	—	—	—	—
	Goldstream	4,343	4,343	3.69	2.67	—	0.56	—	—	—
	Noranda Grey Eagle	973	973		—	—	0.52	0.18	—	—
	Northland Gold - cubic yards	5,000,000	4,000,000					0.038 oz. cu. yd.		
Other Associates										
	Kerr Addison	682	696	—	—	—	—	0.132	—	—
	Tara Mines	64,757	58,353	—	9.50	2.61	—	—	—	—
	Placer Development — Endako*	253,600	222,660	—	—	—	—	—	0.081	—
	— Equity	28,200	26,000	0.37	—	—	3.16	0.058	—	—
	— Gibraltar	257,600	257,600	0.35	—	—	—	—	0.008	—
	— Marcopper	335,800	314,700	0.53	—	—	—	—	—	—

Note: Tonnages to be mined will be determined by future metal prices, operating costs and taxes.
*Mining operations suspended

Belledune Fertilizer

Production	1980	1981	1982
Diammonium Phosphate (000-tons)	177	139	152

Operating levels were adjusted to match the quantities of sulphuric acid received from the Brunswick Smelter. Operations were shut down for 2½ months to schedule essential maintenance and to control product inventory.

Sales of product for 1982 were up 6% but prices were much lower due to weak fertilizer markets and excess production capacity. Unit costs remained unchanged, partly due to improvements in energy conservation.

Eluma S.A. (19%)

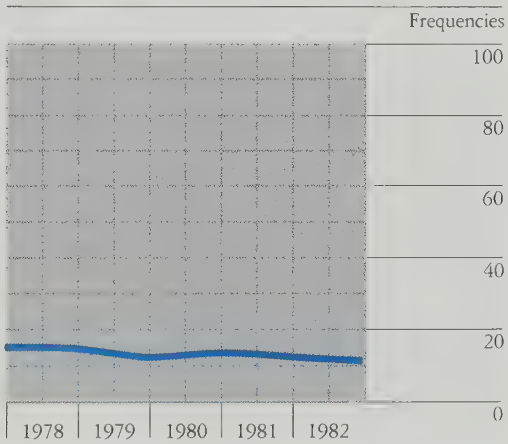
Noranda's investment in this Brazilian group of metal working companies now stands at U.S. $30 million.

Depressed markets for products of the group's brass mills and tube plants pretty well eliminated profits in 1982. Further difficulties were created by high interest rates and international banking problems. Although studies are underway on various natural resource opportunities major projects seem unlikely of fulfillment under present conditions in Brazil.

Gamma Group

Financial - *$ millions*	1981	1982
100% Basis		
Sales	272.6	239.2
Average net assets employed	294.2	327.4
Noranda's Share		
Sales	215.1	172.7
Average net assets employed	132.8	144.0
Employees	2,442	2,015

Safety	1980	1981	1982
Hours Worked (000)	4,621	4,975	4,164
Frequencies	14.2	13.6	11.2



Geco Division

Mine operating results were good with respect to tons of ore treated and ore grade. Further modifications in the milling circuit led to increased metallurgical recoveries. Non-esential mine development was deferred as a cost reduction measure.

Capital expenditures of $1.9 million were limited to production related equipment with the exception of 15 new houses constructed for the continuing employee accommodation program.

Lyon Lake

Output was affected by a nine week suspension of operations during the summer. Changes made in the mining methods and grade control systems to better accommodate the lens type ore bodies provided positive results. Metallurgical results improved.

Exploration drilling to further define the sub creek ore zone was recommenced during the last quarter with encouraging findings. The deepening of the shaft, which was deferred from mid year, is expected to start during the second quarter of 1983.

"F" Group Mine

There was no mining from this open pit operation, although some 161,000 tons of previously stockpiled ore was processed through the Mattabi mill with improved metallurgical results.

The 200,000 tons of ore remaining in the pit will be mined during the summer of 1983 and processed lated in the year and in 1984.

Mattabi (60%)

Mining and treatment of ore was suspended for a nine week period during the summer. Results were very satisfactory on resumption of operations. Metallurgical results improved with the addition of regrind mills in the zinc and copper circuits and computer control of reagent addition in the copper/lead circuit.

The shaft being sunk for the mining of the lower ore zone was bottomed at 1,946 feet in November, excavation for the ore handling services was completed, and installation of equipment was begun.

Capital expenditures amounted to some $6.4 million of which $6.2 million was for the shaft project.

Pamour (48.7%)

Operating profit (loss) *($ millions)*	*1981*	*1982*
Noranda's share	0	(0.9)

Higher grade ores were treated due to the suspension of operations at the No. 2 mine and reduced tonnage from the lower grade copper zone at the Schumacher mine. The ore tons were partially replaced by production from the other operations.

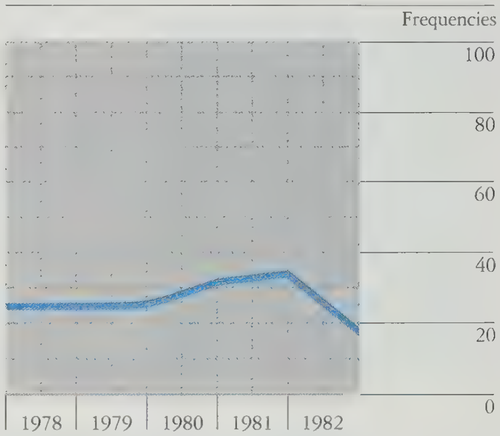
Stringent cost reduction measures lowered the cost per ounce of gold produced. The only capital expenditures were those related to maintenance of operations. Additional revenue was received from the tolling of some 176,000 tons of custom ores through the mills.

Exploration activities, although somewhat curtailed at $321,000, continued during the year with emphasis on the Porcupine area.

Alpha Group

Financial - *$ millions*	*1981*	*1982*
100% Basis		
Sales	226.0	154.0
Average net assets employed	513.2	558.7
Noranda's Share		
Sales	206.1	131.1
Average net assets employed	411.2	440.9
Employees - Canada	1,977	1,204
- U.S.A.	825	415

Safety	*1980*	*1981*	*1982*
Hours Worked (000)	4,553	5,248	3,763
Frequencies	31.8	34.8	18.8



Central Canada Potash

The recession depressed product sales to 850,000 tons or about 60% of shipments achieved in normal years.

The reluctance of customers to carry product inventory resulted in a major shift in marketing strategy to warehousing of potash in leased facilities in high consumption areas in the United States. Excessive product inventories at the plant were controlled by limiting operation of the mine and mill to 186 days.

The acreage of Crown mineral rights within the mineral lease was reduced by approximately 9,900 acres or 14.5% of the crown land held as required by Saskatchewan legislation. The tonnage eliminated through the acreage reduction and by mining during the year reduced ore reserves by 72 million tons or 12%.

Brenda Mines (49%)

Operating profit (loss) *($ millions)*	*1981*	*1982*
Noranda's share	(1.4)	0.3

Mining operations were suspended for six weeks in the summer to control molybdenum inventory. As a result, ore milled was reduced to 10.5 million tons. A sand flotation circuit, installed to re-treat part of the rougher circuit tailings improved recovery of both copper and molybdenum while maintaining concentrate grades.

The Oil and Gas Division participated, or had an interest, in the drilling of 36 wells of which 22 were cased as potential gas producers and 3 as oil wells.

Expenditures were restricted to $2.9 million of which $2.0 million was spent on exploration and $0.9 million for production facilities.

Proven and probable gas reserves as of September 1, 1982 were 29.8 billion cubic feet net of royalty interests.

Brenda's share of gas sales in 1982 from Cache, Clyde, Amisk, Florence, Granlea and Victoria averaged 4.2 million cubic feet per day and produced revenues of $3.1 million before income tax.

Noranda Lakeshore

Depressed copper prices forced suspension of all underground development work in April resulting in the layoff of 200 employees. Underground production continued from the oxide zone at about 75% of the planned rate.

A successful test program resulted in the development and construction of a full scale in situ leach facility designed to extract copper from the broken low grade oxide ore remaining from the mined out block cave operation. Construction and equipment installation are complete and solutions will be introduced in early 1983 when sufficient injection holes have been drilled.

Production of 22,800 tons of excellent quality copper cathode reflected improved grade and recovery.

Babine Division

Market conditions forced the closure of these two low grade copper mining operations – Granisle at mid year and Bell at the end of October. Productivity and safety performance was at optional levels at both mines but the task to make a profit proved impossible.

Some staff remain on site for maintenance and planning purposes and they, together with those laid off and still residing in Granisle, form a nucleus of experience for a prompt reopening should conditions permit.

Boss Mountain Division

The cost to produce molybdenum at this mine exceeded the sales return in a world where stocks were more than one year's demand. This deadly combination made continued operation an impossibility no matter how well the operation performed. The mine is now closed indefinitely.

Alberta Sulphate

Sodium sulphate production of 42,000 tons was limited by plant capacity and sub-normal feed solution strength. The market for sodium sulphate improved during the second half with detergent grade accounting for 68% of shipments.

Goldstream Division

This copper-zinc property near Revelstoke, B.C. is designed to mill 1,500 tons per day. The construction and equipment installation phase was nearly complete at year end, however, mine development has been stretched out for a May 1, 1983 start-up when higher metal prices may prevail.

Noranda Grey Eagle

California U.S.A.

Completion of the construction phase and run-in of the plant and equipment was achieved in October with a cost overrun of U.S.$3.4 million. While design capacity of 500 tons per day was achieved in December, gold and silver recoveries were still below plan. This orebody has an estimated 5½ year life with limited chance of extension and thus will have very little additional capital expenditure. Open pit mining is being done under contract.

Northland Gold (62.5%)

Alaska, U.S.A.

This gold dredging placer deposit produced 2,847 ounces of gold, 35% more than in 1981. Nevertheless, operations, limited by weather and below reserve-grade material, produced a loss which should be more than offset by indicated future gold prices.

Greens Creek (33.8%)

Alaska, U.S.A.

This project has a potential mining tonnage of 1,200 tons per day of gold-silver-lead-zinc ore. Reserves are estimated to be sufficient for an eight year operation.

Geological exploration, environmental assessment and metallurgical testing continued on this potential underground mine on Admiralty Island, Alaska. A decision on the final Environmental Impact Statement is expected in early 1983.

Blackbird (75%)

Idaho, U.S.A.

Continued poor economic conditions and depressed cobalt prices forced suspension of this project. The facilities were placed on a care and maintenance basis pending either a restoration of economic cobalt prices or placement of the property as a strategic material reserve by U.S. authorities. Noranda's investment in this property stands at U.S.$37.4 million.

Ontario Mine

(50% direct; 24% indirect)
Utah, U.S.A.

All mining and exploration activities have ceased and property leases reverted to the owners at this Utah lead-silver property. Salvage operations were completed prior to flooding the mine and the sale of major assets has been finalized. Noranda retains ownership of the 750 ton per day mill. Of the $19.4 million invested, only $1.6 million has been recovered.

Hopewell Land

Florida, U.S.A.

This property was acquired at a time when phosphate supplies necessary to the fertilizer operation at Belledune, N.B. were in doubt. Times have changed even though the permits necessary to develop this phosphate property have been issued. The company is now seeking secondary permits from the county and state and evaluating market projections prior to making a decision on the start of construction.

New Mexico Potash

Some 21,000 acres in Lea County, New Mexico held under lease by Noranda Exploration, Inc. contain 164.9 million tons of drill indicated mineral inventory averaging 15% K_2O equivalent. Such a property cannot be economical in present circumstances but so far is deemed worth holding for better days.

Other Associates

Financial - *$ millions*	*1981*	*1982*
100% Basis		
Sales	386.7	364.0
Average net assets employed	881.5	1,367.4
Noranda's Share		
Sales	118.9	153.4
Average net assets employed	288.2	445.2
Operating losses	(1.7)	(3.8)
Employees – Canada	2,500	1,573
– International	5,224	4,535

Kerr Addison Mines

(49.9% direct; 18.6% indirect)

Operating profit - *$ millions*	*1981*	*1982*
Noranda's share	6.8	5.3

Earnings declined due to reduced profits from zinc and uranium operations. Production was terminated in July at the Mogul of Ireland zinc-lead mine, as economic reserves were exhausted. The uranium salvage leaching operation at Agnew Lake will cease during the first quarter of 1983.

Gold production was 54,610 ounces, a slight increase over the previous year. The Kerr Addison mine, which commenced production in 1938, produced its 10 millionth ounce of gold in April, 1982, a milestone achieved by very few mines in North America. Only small tonnages were added to reserves which, after mining, declined to 696,000 tons.

In November, Zinor Holdings Limited was liquidated and Kerr Addison received its proportionate share (27.3%) of Zinor's assets, including common and preferred shares of Noranda and preferred shares of Brascade Resources Inc. Concurrently, Kerr Addison further increased its direct interest in Noranda to 10.4% by acquiring 7.6 million common shares from other shareholders of Zinor principally in exchange for a similar number of treasury shares of Kerr Addison.

Empresa Fluorspar (98.9%)

Operating profit - *$ millions*	*1981*	*1982*
Noranda's share	0.3	1.3

The depressed aluminum, chemical and steel markets severely reduced the demand for acid and metallurgical grade fluorspar. Consequently, shipments from the 49% owned Cia Minera Las Cuevas were more than 30% below the level of the previous year.

Imports of Chinese metallurgical grade fluorspar into the United States affected the Mexican market share of a steel industry already operating at only 47% of capacity. As a result, the Mexican producer price was reduced 30% early in 1983.

In anticipation that the long term use of fluorspar will be for hydrofluoric acid, the Las Cuevas mill expansion to 300,000 tons of acid grade per year will be completed early in 1983. However, Cuevas still intends to serve those metallurgical markets remaining in the steel mills of North and South America and Europe.

The hydrofluoric acid plant at Juarez, 50% owned by Las Cuevas, encountered some difficulties but operated continuously at about 50% of capacity.

Placer Development
(32.8% direct; 0.3% indirect)

Operating loss - *$ millions*	*1981*	*1982*
Noranda's share	(0.4)	(8.6)

The loss reflects severely depressed metal prices and reduced molybdenum sales. Endako's earnings fell as the market for molybdenum deteriorated. With no early improvement expected, the mine was closed in June for an indefinite period. At year-end molybdenum inventory was 8.5 million pounds.

Normal mining operations at Gibraltar were suspended; however, mill feed is being provided from low grade stockpiles. Low copper prices caused Gibraltar and Marcopper to continue to report losses. Improved silver and gold prices enabled Equity Silver to generate a small profit. Real de Angeles, a Mexican property, commenced silver-lead-zinc production in the third quarter and reported a small loss. Start-up of the operations of the 100% owned Golden Sunlight Gold Mine in Montana is expected early in 1983.

Craigmont Mines
(19.7% direct; 15% indirect)
Year ended October 31

Operating profit - *$ millions*	*1981*	*1982*
Noranda's share	0.1	0.1

Simultaneous treatment of copper ore and coarse iron commenced in 1981 and continued until depletion of the copper ore reserves at the end of March, 1982. The concentrator was then converted to process coarse iron exclusively and the underground workings were abandoned and sealed. Processing of the coarse iron was completed in December, 1982 and approximately 600,000 tons of media grade iron concetrate remained to be sold.

All operations have ended and when the process of liquidating the assets is complete, it is proposed that the company be wound-up.

Tara Exploration and Development (49%)

Operating loss - *$ millions*	*1981*	*1982*
Noranda's share	(8.5)	(1.9)

Tara Mines
(75% owned by Tara Exploration)
The strike which commenced in July, 1981 was resolved early in February, 1982 with production resuming at the end of the month after extensive rehabilitation of the mine.

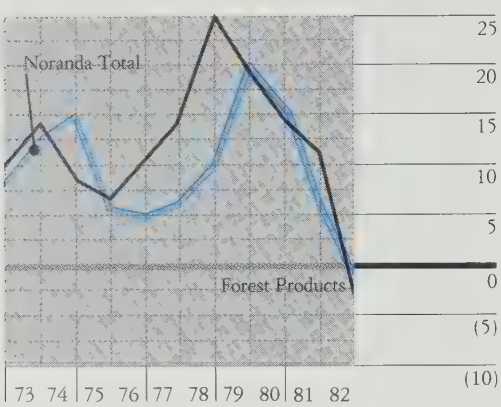
During the period, 1,779,800 tonnes of ore were treated with grades of 1.92% lead and 9.41% zinc, producing 26,867 tonnes of lead and 150,993 tonnes of zinc in concentrate from recoveries of 78.6% and 90.2% for lead and zinc respectively. Mine production fell slightly short of the scheduled performance for the abbreviated production year, since the strike prevented essential mine development which thus must be a high priority for the next few years.

The concentrator operated well. Continued metallurgical test work on the refractory boulder conglomerate ore indicated the promise of improved recoveries.

Continued emphasis was placed on safety, methods and supervisory training. Steps were taken at year-end to embark on an employee involvement programme.

Forest Products

Return on Average Net Assets %



The story of the forest products industry in 1982 is undoubtedly familiar to anyone with exposure to business. The decline in economic activity combined with competitive currency devaluations, rendered the Canadian forest products industry unable to compete profitably. As a result of the familiar lack of house building, markets for solid wood products have been at a level of about 50% of the productive capacity of the North American producers.

Adverse currency relationships culminated in the year end devaluation of the Swedish krona and Finnish markka, which permitted pulp producers in those countries as much as $100 per tonne advantage over their Canadian counterparts. In addition, the Canadian pulp industry has been operating at an annual rate of about 78% compared with 89% in 1981 and the Canadian newsprint industry similarly has had a decline from 94% to 82%. Clearly, this has created an environment of unprofitability.

The lumber industry has been operating in the most depressed environment seen in North America since the 1930s. Indeed, overall production has been at about 50% of installed capacity. The distress caused by these conditions moved certain producers in the United States to charge Canadian shippers with dumping before the U.S. International Trade Commission. The remedy for this is a countervailing duty. Because of the differences in the American and Canadian stumpage systems, the American producers argue that the Canadian industry receives a subsidy from their government amounting to the differential between deemed U.S. and Canadian stumpages. This is a difficult and complex argument which happily for Canada was determined to have no merit in a preliminary decision announced in Washington on March 8, 1983.

Total Financial - *$ millions*	*1981*	*1982*
100% Basis		
Sales	2,701.0	2,829.3
Average net assets employed	2,491.0	3,178.6
Noranda's Share*		
Sales	1,543.4	1,710.2
Average net assets employed	975.0	1,355.0
Operating profit/loss	21.1	(55.7)
Employees – Canada	27,500	22,500
– International	5,700	5,700

Throughout the forest industry, salaried employees have faced a variety of situations ranging from reduced employment to salary reductions or freezes. However, negotiated wage increases remained unchanged and during the year increases as high as 13% were installed. As wages and salaries account for approximately 1/3 of the forest industry's total cost of manufacture, they obviously have a pervasive impact. Even so, hourly employees were unwilling to consider any renegotiation during the year, which was not helpful in view of the distressed industry. This is best exemplified by the fact that only 66% of the available regular production hours in the Noranda forest group were worked in 1982. The fact that the industry has exceeded its ability to pay may cause difficulties during the forthcoming negotiations in Western Canada in 1983.

Amongst the Noranda companies, capital expenditures proved to be the main excitement, as the financial resources available for their completion became scarcer and the markets available for additional production were harder to

Total Production 100% Basis	1980	1981	1982
Lumber (MM fbm)	1,418	1,388	1,026
Panel products (MM sq. ft. 1/16″)	3,158	4,881	5,075
Market pulp (000 tons)	961	839	683
Newsprint and paper (000 tons)	1,175	1,444	1,420
Container board (000 tons)	31	348	389

Total Production Noranda's Share	1980	1981	1982
Lumber (MM fbm)	567	639	520
Panel products (MM sq. ft. 1/16″)	1,231	2,273	2,779
Market pulp (000 tons)	437	444	388
Newsprint and paper (000 tons)	591	815	846
Container board (000 tons)	20	176	195

find. These projects include the completion of Northwood II (the doubling of that company's pulpmill to 1,450 tonnes per day), the linerboard machine in Alabama for MacMillan Bloedel and the steam pipeline between Fraser's Edmundston and Madawaska plants. The Atholville pulpmill rebuild of Fraser continued and the ultra high yield sulphite project was completed at Maclarens. That company also commenced the construction of a new boiler and other effluent control facilities to meet permit requirements and simultaneously achieve energy efficiencies. Fraser agreed to acquire 50% of Island Paper from MacMillan Bloedel, which will permit completion of a second paper machine and broaden Fraser's Canadian fine paper interests.

Fraser has almost reached the limit of its ability to borrow. However, the company has the ability to manage its debt, particularly since on completion of the present projects it will be a completely rebuilt and modern company.

Northwood Pulp, by the choice of its parents, is in a very highly leveraged position. As a result of the prolongation of the project due to work stoppages and the unforeseen high interest rates during the period of construction, the company has some $70 million more debt than was planned. Nevertheless, it is believed that with any reasonable restoration of markets, existing levels are within the company's capacity to pay.

MacMillan Bloedel has taken very strict measures to realize cash from superfluous operations or assets and has permitted only essential capital expenditures in addition to completion of major projects. Its debt-equity ratio is tolerable and almost attractive relative to the western industry.

Finally, Maclaren has by far the best position in the industry, although it does have some major commitments ahead.

In all cases, it appears that the period of greatest strain has been passed and there is every reason to believe that balance sheets will strengthen in future.

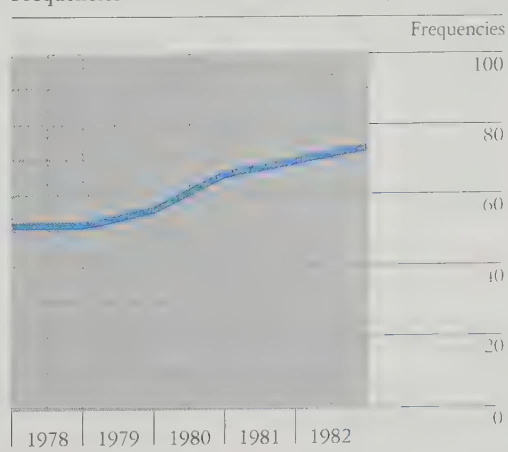
James Maclaren Industries

Operating profit - *$ millions*	1981	1982
Noranda's Share	28.2	19.4

Production	1980*	1981	1982
Newsprint (000 tons)	176	180	165
Pulp (000 tons)	127	126	95
Lumber (MM fbm)	24	19	11
Particleboard (MM sq. ft. 1/16″)	–	–	524

*Acquired February, 1980.

Safety	1980	1981	1982
Hours Worked (000)	2,886	2,863	2,417
Frequencies	64.7	69.1	72.8



The company's outstanding operating results were fortified by a $20.2 million after tax profit on sale of certain venture investments. Operations were also profit-

able excepting those in solid wood products. The associated company, Normick Perron Inc., was unprofitable in lumber and had the added startup costs of its joint venture newsprint machine in Amos, Quebec.

A project to convert to ultra high yield sulphite at Masson was completed according to plan. In the Thurso pulpmill, work proceeded on the installation of a new recovery boiler and certain effluent treatment facilities, to gain energy efficiencies and meet environmental requirements. A third project in the formative stage is modernization of the Masson newsprint mill.

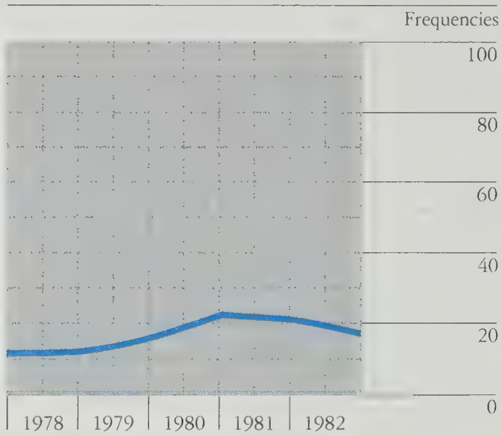
Maclaren's labour relations were good with very little evident friction. The company settled its main contracts in tune with the "Eastern settlement", which was 12% in the first year and 10% in the second.

Fraser Inc. (63%)

Operating profit – *$ millions*	*1981*	*1982*
Noranda's Share	12.2	4.1

Production	*1980*	*1981*	*1982*
Lumber (MM fbm)	93	74	39
Pulp (000 tons)	94	76	17
Paper (000 tons)	414	460	442
Boxboard (000 tons)	31	29	26

Safety	*1980*	*1981*	*1982*
Hours Worked (000)	7,786	7,698	7,003
Frequencies	23.1	21.3	16.9



After interest charges, Fraser lost $4.8 million. However, they had an operating profit as the bulk of their business, which is fine and groundwood papers, held up relatively well. The sawmills were limited to 40% of production and the Atholville pulpmill was closed in April until the rebuild completion.

Major projects included the Edmundston-Madawaska steam pipeline which efficiently transports energy produced from waste and saves 120,000 barrels of fuel oil per annum. The Atholville rebuild proceeded normally and there is confidence that the company will have in operation a new pulpmill at competitive capital costs per ton by mid-1983.

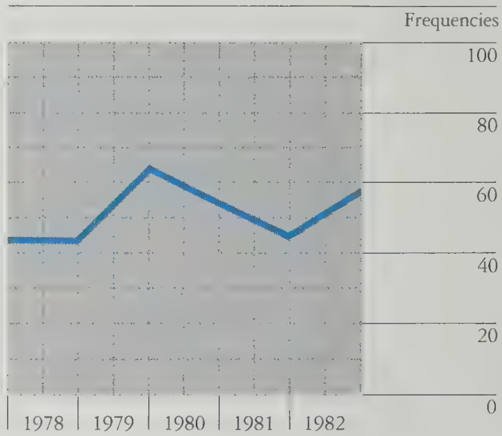
Operations went well at the Thorold paper mill which continued to find new efficiencies in its plant operations and attractive market niches for its products. These Canadian paper operations were enhanced at year-end with agreement to acquire 50% of Island Paper from MacMillan Bloedel. This west coast plant is in the final months of a program to expand its fine paper capacity by 75,000 to 115,000 tons per annum.

Northwood Pulp and Timber (50%)

Operating profit (loss) *($ millions)*	*1981*	*1982*
Noranda's Share	5.1	(10.8)

Production	*1980*	*1981*	*1982*
Plywood (MM sq. ft. 1/16")	775	842	908
Lumber MM fbm	537	471	341
Pulp (000 tons)	237	207	213
Waferboard (MM sq. ft 1/16")	778	831	1,015

Safety	*1980*	*1981*	*1982*
Hours Worked (000)	3,906	3,462	4,024
Frequencies	53.7	46.2	58.6



Northwood managed to maintain its earnings through the first half year after which the pulp business went into a free fall. The wood product plants had a somewhat reverse experience as business began to develop a solid foundation by year-end, permitting some regular operations.

The huge project to double the pulpmill had its problems during the year, but was complete and starting up in December. Delays in 1981 and 1982 by

forest product and construction strikes set the project back about five months and together with high interest rates added some $70 million to the planned cost.

The pulpmill's twin facilities permitted a phased checkout and startup of the new plant, and full operations began in January, 1983. Market conditions may limit operating rates, however it is clear the company has a superb facility that should be able to compete successfully with any existing producers.

The wood products division had its least satisfactory year since its inception. The sawmills operated at a 57% rate and the waferboard and plywood plants 61%. When operating, all these plants achieved record levels of productivity.

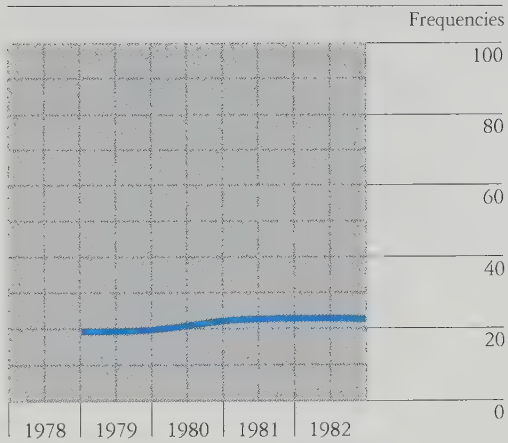
MacMillan Bloedel (49%)

Operating loss – *$ millions*	*1981*	*1982*
Noranda's Share	(23.3)	(57.7)

Production	*1980*	*1981**	*1982*
Lumber (mm fbm)	1,171	910	635
Pulp (000 tons)	482	377	359
Panel products (mm sq. ft. 1/16″)	4,566	4,188	2,628
Newsprint & paper (000 tons)	1,307	893	813
Container board (000 tons)	480	475	363

*Acquired May, 1981.

Safety	*1980*	*1981*	*1982*
Hours Worked (000)	44,599	39,179	29,040
Frequencies	21.4	22	21.6



Operations throughout the company were severely restricted during the year in response to market forces. Hardest hit were the B.C. operations which saw the indefinite shutdown of a linerboard machine at Alberni, a paper machine at Powell River and part of the pulpmill at Harmac. The Chemainus sawmill also had to be closed indefinitely with slightly less ominous actions at Somass, Canadian White Pine and Queensborough. Logging was about 60% of previous norms and capital expenditures were restricted to essential care and maintenance or mandated changes, with the exception of the expansion program at Pine Hill, Alabama.

The Canadian packaging business did well in the West but a long strike at some of the Eastern plants lasted until just before year-end and cost the company over $6 million. U.K. packaging had a trying and unprofitable year reflecting the British economy. KNP in Holland had good results in its packaging business and fine paper mill at Lanaken, Belgium. Three other paper plants, two in Holland and one in Spain, struggled with short production runs, excessive labour inputs and very competitive pricing.

In Alabama, operations reflected the general state of business in the U.S. with low prices and limited volumes the rule. The high spot was the completion in November of the new corrugating medium machine on time, well under budget, and in such condition as to produce saleable product in the first day's operation.

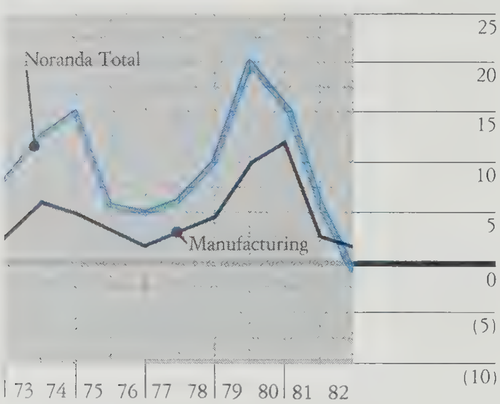
The company acquired full ownership of Embrasca, the Brazilian forest plantation established in a partnership in 1964.

Throughout the company, efforts were made to maximize efficiencies, trim overheads and find a better way. The Vancouver office building and 50% of Island Paper Mill were sold, excess inventories were liquidated and sale of U.S. tax benefits yielded U.S.$65 million. The new decentralized mode of operation in British Columbia permitted significant overhead reductions and, most importantly, brought decision-making entirely to the operations concerned.

All of these actions have combined to preserve a relatively strong balance sheet and condition the company for successful participation in the economic recovery which had begun to appear at year-end.

Manufacturing

Return on Average Net Assets %



Wherever the Noranda Manufacturing Group turned in 1982 it saw failure of its mainstays. Automobile sales and housing markets were extraordinarily depressed. Wage adjustments from earlier settlements and capital costs continued to be high. Foreign exchange fluctuations were widespread, interest rates remained high, particularly in the earlier part of the year, and the U.S. and Canadian dollars were high relative to other world currencies. Although some manufacturing operations escaped operating losses, all were depressed and failed to provide the hours of work for their employees that they had in previous years. Wire and cable operations were reduced by 20%, while the aluminum operations were operating at 70% at the end of the year and brass mills at an even lower rate.

Noranda's share of the 1982 activities of companies in manufacturing amounted to sales of $1,506.2 million and a loss of $14.2 million compared to an operating profit of $58.6 million in 1981. This of course is an insufficient return on the average net assets employed of $1,152.9 million.

The most significant losses were incurred in the primary aluminum production facility and in the international wire and cable operations which were devastated by the devaluation of the Mexican peso.

As referred to a year ago, these operations also suffer from declining metal prices. Since metals are transferred between companies of the group at real third party prices, working inventories must be written down as the metal concerned is devalued. Thus conversion operations, however efficient, may be turned into losses by metal price declines.

The bargaining calendar in 1982 included 15 contracts of which all but three were settled without work stoppages. We take no pride in these stoppages, but believe strongly that the company must obtain workable agreements and affordable wages that will provide for the long term manageability and profitability of an operation and therefore the security of jobs. As with many other companies, Noranda faces the attempts of organized labour to homogenize wage rates across industry lines and geographic areas. Unfortunately, some operations simply cannot sustain the wage rates of others, even though they may be neighbours in the same area, or in the same industry but different parts of the country. There is also the problem whereby technological advancements render certain skills obsolete and reduce manpower needs. There is no ready answer for these problems and their resolution may involve more labour unrest than would otherwise occur. Noranda, for its part, provides for staff reductions through attrition in so far as possible and makes every effort to allow for the employee to retrain and maximize his talent.

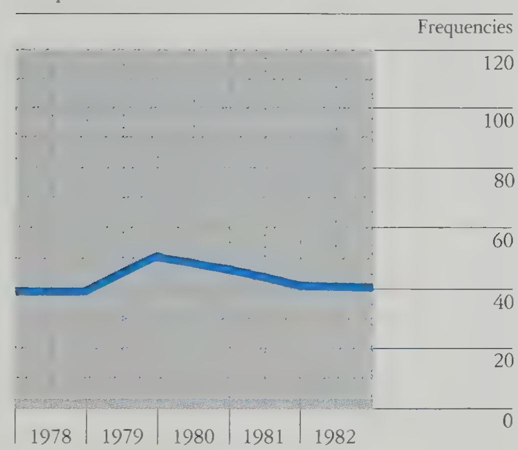
Considerable progress was made in the manufacturing capital program through the completion of major projects referred to elsewhere in this report. With these out of the way, the capital commitment in 1983 will be but 17% of that in 1982.

Total Financial - *$ millions*	*1981*	*1982*
Sales	1,520.4	1,506.2
Average net assets employed	863.0	1,152.9
Operating profit (loss)	58.6	(14.2)
Employees – Canada	5,100	4,200
– U.S.A.	5,700	5,400
– Other	9,800	9,800
Metal Consumption – *Tons*		
Canada Wire	88,500	87,700
Noranda Metal	48,600	27,500
Prime Product Shipped – *Tons*		
Aluminum Group	155,600	169,800
Norcast Division	48,500	53,700
Wire Rope	46,100	36,800

Toronto Group

Financial – *$ millions*	1981	1982
Sales	776.8	852.8
Average net assets employed	303.6	435.5
Operating profit	39.3	16.3
Employees – Canada	3,012	2,568
– International	12,673	12,505

Safety *(Canada only)*	1980	1981	1982
Hours Worked (000)	5,264	5,989	5,497
Frequencies	47.8	40.9	40.5



The wisdom of the 1981 acquisition of Carol Cable by Canada Wire was certainly evident during the past difficult year. Although Carol did not operate fully nor produce the profits that might be expected over the long-term, its ability to respond quickly to the marketplace sustained a profitability that was not possible in other operations. Being close to the consumer, changes in the market were immediately noticeable and the company's agile mode of operation permitted good control of inventories.

Having completed its continuous rod mill in Montreal, Canada Wire has been unable to renew its collective agreement with the Union and a strike which began August 30, continues. Fortunately, the facility can be operated with staff who have learned the operation as they would in no other way and it is expected, as a result, that productivity will exceed feasibility estimates. Other newly renovated operations in the company include the Leaside plant and Grandview Industries, the plastics fabricating arm. Grandview's business also has been crippled by the economic recession, which will inevitably cause further rationalization in the plastics business.

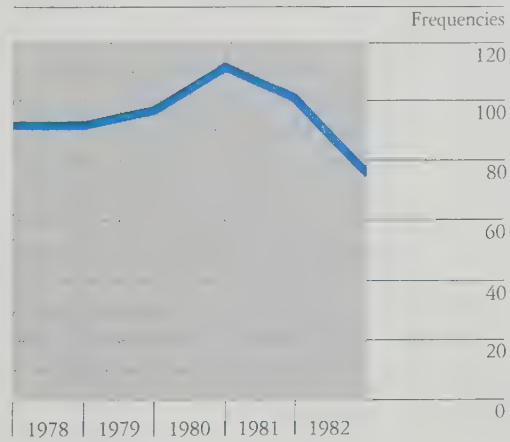
One of the most frequently touted threats to the wire and cable industry is in the field of telecommunications, wherein fibre optics are replacing copper conductors. Canada Wire has been in these developments for seven years and this year completed its fibre optic cabling facility in Winnipeg. It seems likely that there will be further developments in this field in the months ahead on an accelerating basis and Canada Wire is ready to take advantage of the opportunities as they appear.

The company's international group is now under considerable stress. The Australian interest was disposed of, the Irish interest failed to develop as hoped and the Mexican interest was devastated by the peso devaluation. Nevertheless, all eight international groups were profitable in their local currencies.

Montreal Group

Financial – *$ millions*	1981	1982
Sales	280.4	205.9
Average net assets employed	124.0	108.7
Operating profit/loss	4.4	(3.0)
Employees – Canada	2,077	1,625
– U.S.A.	498	316

Safety	1980	1981	1982
Hours Worked (000)	4,006	3,993	3,186
Frequencies	112.8	101.6	78.4



Despite benefitting by recent years' efforts in plant rationalization and management streamlining, this group could not beat the devastating economic circumstances faced in 1982. These included a three months strike in the Montreal East plant. Unfortunately, the brass mill industry simply cannot sustain the level of wages demanded by the Union and it was necessary to endure the strike to underscore the economic realities. Other than that, there have been considerable improvements in the whole labour area and it is believed that management and labour alike identify with the same goals as never before.

The situation in the brass industry is exemplified by the fact that shipments by the American brass mills in 1982 declined some 23% from 1981 levels. Noranda Metal has stayed in business because of Noranda's policy of vertical integration, the wisdom of which may bear fruit as others leave the industry. The company has excellent specialized facilities for tube in Montreal East and New Westminster and for sheet in Fergus. In addition, its U.S. facilities have developed promising new heat transfer products.

The company's venture into nuclear tubes has been a difficult road. Nevertheless, the marriage with Sandvik into NorSand Metals has proven to be successful and that division operated profitably. Failing alternatives, the future of this venture rides with the nuclear power industry.

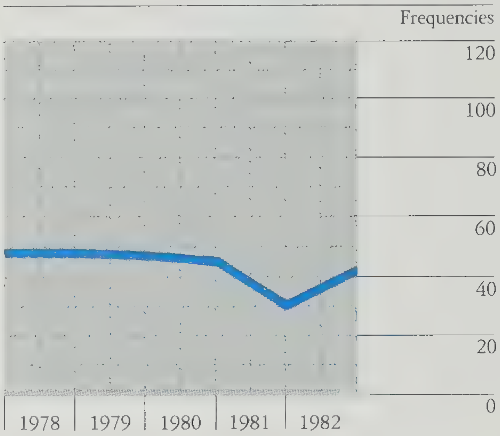
The Wire Rope companies, whose principal customers are the building and resource industries, suffered accordingly. Even the low level of available market was attacked aggressively by importers. Nevertheless, the Canadian operation, which has a commanding share of that market, was profitable. Its American brother, Bridon American, could not withstand the pressures in the latter half of the year and turned into a loss position.

The Norcast foundry and recycling operations similarly suffered from the decline in the resource industries. The steel industry is not in need of scrap, or any other kind of feed and with the decline in iron ore production, Norcast's principal markets almost disappeared. A new venture into magnetic plastic mill liners is proving a technical success, although a commercial success is more difficult in view of the depressed resource sector.

Cleveland Group

Financial - *$ millions*	1981	1982
Sales	463.2	447.5
Average net assets employed	434.8	608.7
Operating profit/loss	14.8	(27.5)
Primary aluminum production – tons	149,000	127,000
Employees – U.S.A.	2,370	2,340

Safety	1980	1981	1982
Hours Worked (000)	3,083	3,164	4,035
Frequencies	45.4	30.9	41.3



The landmark event in 1982 for the aluminum group was the completion of the third potline at New Madrid. This was done at a cost of U.S. $240 million, which was well within budget and on time. Regrettably, the timing was not good, as the completion coincided with perhaps the lowest spot in the aluminum cycle for years. Indeed, the first two potlines were only operating at 75% capacity (with half of one having been shut down in April). With the closure of much of the world's obsolete aluminum reduction capacity, as well as the significant power cost increases to some other producers, Noranda Aluminum is fairly well placed to benefit from any upturn in the aluminum market. The Group's financial position was strengthened by the sale of future tax benefits which yielded approximately U.S.$55 million.

The low level of house-building activities is a tremendous depressant on the activities of Norandex, the company's aluminum building products, fabrication and distribution company. The company's strength is its distribution network which was able to take advantage of the do-it-yourself repair and restoration trade. Nevertheless, this was not enough in 1982 to maintain the operation in a profitable mode, as productive capacity far exceeded the available markets. Fortunately, these markets took a decided turn for the better at year-end.

Norandal, the company's rolling and foil mill in Huntingdon, Tennessee had its best year since acquisition and is proving its ability to produce high quality specialty foil, cable wrap and siding coil. This company can sustain its profitability with attention to a product which fits a special niche in the market place.

The aluminum group saw the retirement of its President of eight years, Bruce Allan, at the end of December. Mr. Allan has been a principal architect in the creation of the company and in particular, its excellent management group. He was replaced by Clint W. Halstead, who has been with the company since June, 1970. For the past seven years he has been in charge of Noranda Aluminum at New Madrid, Missouri. In addition, Mr. Elzie W. Borders was appointed President of Norandal in July.

Accounting Policies

Basis of presentation of financial statements

The accompanying financial statements are prepared in accordance with accounting principles generally accepted in Canada and include, the accounts of Noranda Mines Limited (the Company) and all of its subsidiaries (Noranda). Interests in associated companies in which it has significant influence but not majority share ownership are accounted for on the basis of cost plus equity in undistributed earnings since the dates of investment. The difference between the cost of the shares of associated companies and the underlying net book value of the assets is amortized over the life of the assets to which the difference is attributed.

Certain subsidiary and associated companies own shares in the Company. The Company's pro rata interest in the carrying value of such shares has been deducted from shareholders' equity. Similarly, the Company's earnings per share have been calculated on the number of shares outstanding after reduction for such intercompany holdings.

Translation of foreign currencies

Amounts stated in currencies other than Canadian dollars are translated as follows: working capital at exchange rates prevailing at the year end; fixed and other long-term assets, long-term debt, and depreciation provisions on the basis of historic rates of exchange; revenues and expenses (other than depreciation) at average rates during the year. Exchange translation gains and losses are included in consolidated earnings.

Inventories

Mine products are valued at estimated realizable value and other inventories at the lower of cost (determined on a first-in - first-out or average cost basis) and replacement value.

Futures contracts

From time to time, Noranda owns futures contracts for the purchase or sale of metals and currencies not related to production. These contracts are not reflected in Noranda's accounts, beyond the amount of deposit required, until maturity date although provision is made for any estimated unrealized losses.

Depreciation and development charges

Depreciation of property, buildings and equipment and amortization of development expenditures are based on the estimated service lives of the assets calculated using the method appropriate in the circumstances, for the most part straight-line for fixed assets and unit of production for development.

Exploration

Mineral and petroleum exploration expenditures are charged against current earnings unless they relate to properties from which a productive result is reasonably certain or on which work is in process. Gains on sale or recoveries of costs previously written off are normally credited against exploration expense.

Preproduction costs

Preproduction costs including interest on major projects are deferred until the related facility achieves commercial production volume and are amortized over a reasonable period on either a straight-line or a unit of production basis.

Income taxes

Noranda follows the tax allocation method of accounting for income taxes. Under this method, timing differences between reported and taxable income result in provisions for taxes which are not currently payable. Such timing differences arise principally as a result of claiming depreciation, development, exploration and preproduction costs for tax purposes at amounts differing from those charged to reported income. Investment tax credits are reflected in earnings in the year of realization.

Interest

Interest expense is charged to earnings except interest that can be identified with a major capital expenditure program.

Capital leases

Noranda leases certain property, buildings and equipment under long-term capital leases which are recorded in the financial statements as fixed assets and long-term debt.

Pension costs

Noranda has various contributory pension plans which cover substantially all employees. Current service pension costs are charged to earnings as they accrue. Past service costs are charged to earnings at rates which, based on annual independent actuarial estimates, will fully provide for the obligations over periods not longer than those permitted by various regulatory bodies.

Noranda Mines Limited
(Incorporated under the laws of Ontario)

Consolidated Balance Sheet

(in thousands)
December 31

Assets	1982	1981
Current assets		
Cash and short term notes	$ 21,898	$ 25,806
Marketable investments, at cost (quoted market value $111,987; 1981 – $158,921)	108,865	135,891
Accounts, advances and tolls receivable	712,023	665,317
Inventories	963,852	909,119
	1,806,638	1,736,133
Investment in and advances to associated and other companies [note 2]	1,097,333	1,159,265
Fixed assets		
Property, buildings and equipment, at cost	3,777,687	3,225,385
Accumulated depreciation	(1,279,684)	(1,188,210)
	2,498,003	2,037,175
Other assets [note 3]	302,916	316,071
	$ 5,704,890	$ 5,248,644

Auditors' Report

To the Shareholders of
Noranda Mines Limited:

We have examined the consolidated balance sheet of Noranda Mines Limited as at December 31, 1982 and the consolidated statements of earnings, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of Noranda Mines Limited as at December 31, 1982 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Clarkson Gordon
Chartered Accountants

Toronto, Canada,
February 24, 1983.

Liabilities	1982	1981
Current liabilities		
Bank advances	$ 184,571	$ 244,836
Accounts payable	492,250	500,766
Taxes payable	46,731	81,747
Debt due within one year	41,344	41,752
	764,896	869,101
Deferred liabilities and revenues	87,187	38,439
Taxes provided not currently payable	276,798	339,173
Long-term debt [note 4]	1,722,854	922,315
Minority interest in subsidiaries	147,273	210,204
Shareholders' equity [note 6]		
Capital stock	1,658,520	1,641,444
Retained earnings	1,187,563	1,388,180
	2,846,083	3,029,624
Less the Company's pro rata interest in its shares held by subsidiary and associated companies [note 2 (e)]	(140,201)	(160,212)
	2,705,882	2,869,412
Commitments and contingencies [note 5]		
	$ 5,704,890	$ 5,248,644

(See accompanying notes)

On behalf of the Board

Alfred Powis

A. Powis, Director

W. P. Wilder

W. P. Wilder, Director

Consolidated Statements of Earnings and Retained Earnings

(in thousands)

Years ended December 31

Earnings

Earnings	1982	1981
Revenue		
Sales	$2,793,678	$2,944,350
Investment income	36,519	86,044
	2,830,197	3,030,394
Expense		
Cost of production	2,303,154	2,272,728
Administration, selling and general expenses	239,092	207,172
Depreciation ($138,958; 1981 - $137,254) and amortization	169,105	157,673
Exploration	98,268	121,601
Interest-net (including interest on long-term debt of $131,669; 1981 - $103,903)	145,525	95,444
	2,955,144	2,854,618
	(124,947)	175,776
Income and production taxes	(65,890)	59,415
Minority interest in earnings of subsidiaries	6,457	9,079
	(59,433)	68,494
Earnings (loss) before the following	(65,514)	107,282
Share of losses in associated companies	(74,659)	(1,503)
Unusual items (note 9)	57,229	59,027
Earnings (loss)	$ (82,944)	$ 164,806
Earnings (loss) per common share	$ (1.00)	$ 1.33

Retained Earnings

Retained Earnings	1982	1981
Balance, beginning of year	$1,388,180	$1,394,969
Earnings (loss)	(82,944)	164,806
	1,305,236	1,559,775
Dividends (note 6(e))	117,673	171,595
Balance, end of year	$1,187,563	$1,388,180

(See accompanying notes)

Consolidated Statement of Changes in Financial Position

(in thousands)
Years ended December 31

Source of Funds	*1982*	*1981*
Operations -		
Earnings (loss)	$ (82,944)	$ 164,806
Depreciation and amortization	169,105	157,673
Taxes provided not currently payable	(47,541)	(3,661)
Minority interest in earnings of subsidiaries	6,457	9,079
Share of losses plus dividends of associated companies	68,611	32,334
Gain on sales of shares and other [note 9 (b)]	-	(59,027)
	113,688	301,204
Working capital acquired through		
Carol Cables acquisition	-	105,180
Brenda Mines Limited [note 2 (c)]	24,495	
Proceeds on sale of		
British Columbia Forest Products Limited	-	180,157
Issue of common shares	17,076	510,389
Long-term financing	899,957	188,692
Fixed asset disposals	31,945	25,624
Other	42,621	11,547
	1,129,782	1,322,793
Use of Funds		
Fixed assets	662,747	596,455
Deferred development, exploration and other expenditures	42,921	83,696
Investments and advances	29,061	59,052
Dividends - shareholders	117,673	171,595
- minority shareholders of subsidiaries	3,252	11,176
Payment of long-term debt	99,418	19,251
Investment in MacMillan Bloedel Limited	-	193,714
Redemption of preferred shares	-	142,343
	955,072	1,277,282
Increase in working capital	174,710	45,511
Working capital		
At beginning of year	867,032	821,521
At end of year	$1,041,742	$ 867,032

(See accompanying notes)

1. Accounting Policies

The principal accounting policies followed by Noranda are summarized under the caption "Accounting Policies".

2. Investments

(a) Investments in and advances to associated and other companies consist of:

	Noranda's Direct Interest	Carrying Value 1982	1981
			(in thousands)
Associated companies carried on an equity basis –			
Brenda Mines Limited (c)	49%	$ 19,631	$
Craigmont Mines, Limited	20%	1,365	2,113
Kerr Addison Mines Limited	49%	43,154	19,237
MacMillan Bloedel Limited (d)	49%	614,310	659,430
Northwood Forest Industries Limited	50%	77,106	85,017
Pamour Porcupine Mines, Limited	49%	1,809	2,686
Placer Development Limited	33%	67,830	78,883
Tara Exploration and Development Company Limited	49%	49,613	47,678
Frialco/Friguia Guinean Consortium	20%	14,519	15,762
Frenswick Holdings Limited investment in Zinor Holdings Limited (e)		-	90,536
Associated manufacturing companies		60,672	74,455
Other companies		40,332	70,852
		990,341	1,146,649
Other investments and advances, at cost –			
Shares		104,117	8,236
Advances		2,875	4,380
		$1,097,333	$1,159,265

(b) Included above are shares carried at a book value of $837,598,000 which had a quoted market value of $847,888,000 at December 31, 1982 ($846,158,000 and $653,984,000, respectively, at December 31, 1981). The latter amount does not necessarily represent the value of these holdings which may be more or less than that indicated by market quotations.

(c) During the year Noranda's interest in Brenda Mines Limited was reduced to 49% and the accounts of Brenda are no longer consolidated with those of Noranda. Accordingly Brenda's working capital deficiency of $24,495,000 is shown as a source of funds.

(d) Summarized financial information of MacMillan Bloedel Limited as at December 31, 1982 and 1981 and for the years then ended is as follows:

	1982	1981
Financial Position		*(in thousands)*
Assets:		
Current	$ 640,500	$ 721,700
Investments and other	84,900	84,800
Property, plant and equipment	1,365,800	1,266,300
Other	59,200	99,300
	2,150,400	2,172,100
Liabilities:		
Current	429,700	408,500
Long-term debt	676,000	596,800
Deferred income taxes	130,200	196,100
Minority interest in subsidiaries	5,000	6,200
	1,240,900	1,207,600
Shareholders' equity	909,500	964,500
	2,150,400	2,172,100
Results of operations		
Sales and other income	1,862,400	2,230,200
Costs and expenses	2,053,900	2,280,100
	(191,500)	(49,900)
Income tax recovery	95,300	31,300
Other (including gains on sale of tax credits; 1981 gains on disposals)	38,900	21,900
Net earnings (loss)	(57,300)	3,300

(e) Pursuant to a plan of liquidation Zinor Holdings Limited (Zinor) and Frenswick Holdings Limited (Frenswick) distributed their assets to their shareholders on November 26, 1982. In the liquidation Noranda common shares otherwise distributable by Zinor to Frenswick were acquired by Kerr Addison Mines Limited (Kerr) for consideration of Kerr common shares, and Noranda preferred shares distributable by Zinor to Frenswick were sold.

As a result of these transactions Noranda's direct interest in Kerr has increased from 41% to 49% at a cost of $5,931,000 and Noranda's reciprocal interest in its common and preferred shares has been reduced by $5,931,000 and $14,080,000 respectively.

3. Other Assets

	1982	1981
		(in thousands)
Deferred preproduction and mine development	$ 238,885	$ 255,025
Deferred exploration	29,195	26,873
Other	34,836	34,173
	$ 302,916	$ 316,071

4. Debt

(a) Long-term debt (in thousands)

	1982	1981
Noranda Mines Limited		
9¾% notes due July 15, 1982	$	$ 25,000
9¾% sinking fund debentures May 1, 1994	32,410	39,210
7½% sinking fund debentures October 1, 1988	18,300	19,468
9[illegible]% sinking fund debentures October 15, 1990	29,363	31,565
Notes payable and revolving term loans [note 4(b)]	500,000	166,097

Noranda Inc.		
5½%-9¼% mortgage notes payable in monthly instalments to 1990 — ($3.825 U.S.; 1981 - $4.534 U.S.)	4,203	4.880
Noranda Aluminum Inc.		
10½% secured notes due October 1, 1995 ($62,400 U.S.; 1981 - $66.800 U.S.)	64,394	68.678
9.75% note due January 10, 1987 ($30.000 U.S.; 1981 - $30.000 U.S.)	35,643	35.229
9.75% note due 1985 ($16,667 U.S.; 1981 - $20,000 U.S.)	19,500	23.400
Variable rate notes due February 1, 1983 to August 1, 1987 ($25.000 U.S.; 1981 - $25.000 U.S.)	29,250	29.250
Phase I and III pollution bonds due October 1, 2002 ($45.000 U.S.)	55,517	-
8% pollution control revenue bonds due April 1, 2001 - ($10.500 U.S.; 1981 - $10.500 U.S.)	10,315	10,315
Capital lease - 5.90% industrial revenue bonds, serial and sinking fund, issues, maturing November 1, 1993 ($54,340 U.S.; 1981 - $55.180 U.S.)	58,606	59.180
Noranda Inc.		
10% note payable due 1988 - ($30.000 U.S.; 1981 - $30.000 U.S.)	35,979	35.979
Revolving term loans due 1984 to 1986 ($306.025 U.S.; 1981 - $50.000 U.S.)	373,945	59.940
Brunswick Mining and Smelting Corporation Limited		
5.85% first mortgage sinking fund bonds series "A" maturing April 1, 1986	3,054	3.079
7.25% general mortgage sinking fund bonds, series "A" maturing August 15, 1987	4,749	5.144
11% general mortgage sinking fund bonds, series "B" maturing December 1, 1996	17,342	17.342
Fraser Inc.		
6⅛% sinking fund debentures due April 1, 1987 - ($3.750 U.S.; 1981 - $4.500 U.S.)	4,162	4.943
10¾% sinking fund debentures due June 1, 1992 - ($30.340 U.S.; 1981 - $32.670 U.S.)	31,363	33.694
Revolving term loan - due 1985 convertible to a term loan due 1997	185,003	82.335
Purchase money mortgage	20,000	24,000
James Maclaren Industries Inc.		
5¾% sinking fund debentures due 1987	7,478	8.831
Canada Wire & Cable Limited		
Bank notes due 1983 to 1992 - ($123.700 U.S.; 1981 - $110.000 U.S.)	172,077	130.449
Sundry indebtedness	51,545	46.059
	1,764,198	964,067
Debt due within one year	41,344	41,752
Total	1,722,854	922.315

Maturities of long-term debt are as follows:
1984 - $273,860; 1985 - $557,448; 1986 - $120,894; 1987 - $72,226 and subsequent $698,426.

(b) Notes payable with maturities in 1983 and revolving term loans have been classified as long-term debt as a result of unconditional commitments the Company has received from its bankers for contractual term credits of $500,000,000 expiring from June 30, 1984 to December 31, 1985.

5. Commitments and Contingencies

(a) Approved capital projects and financing commitments outstanding total approximately $686,465,000 at December 31, 1982, extending over three years.

(b) Noranda had guaranteed or was contingently liable for repayment of loans of associated companies to the extent of approximately $47,000,000 at December 31, 1982.

(c) As at December 31, 1982 some of Noranda's pension plans are underfunded and some are overfunded by a greater amount. The unfunded obligation is estimated at $39.200.000 and includes Fraser Inc. - $28,230,000 and Canada Wire & Cable Limited - $8,643,000.

(d) At December 31, 1982 deferred expenditures on the Blackbird cobalt property amounted to $46,300,000. While this project continues to be uneconomic at current prices, the United States government may designate cobalt a strategic metal and support the development of the orebody. If such support is not received the future viability of the project will be reassessed and some write-down in the carrying cost may be necessary at that time.

6. Shareholders' Equity

(a) Capital stock –

	1982	1981
	(in thousands)	
Authorized:		
13,576,563 Series A cumulative redeemable convertible preferred shares of $100 par value		
200,000,000 Common shares of no par value		
Issued:		
Series A 9½% preferred shares	$ 358,334	$ 358,334
Common shares	1,300,186	1,283,110
	$1,658,520	$1,641,444

(b) Authorized capital –
Of the authorized 13,576,563 Series A preferred shares, the Company has designated 3,601,563 as 9½% cumulative redeemable convertible preferred shares Series A. Each of these shares is convertible into 2.75 common shares until June 15, 1987 for which 10,000,000 common shares have been reserved.

(c) Summary of common share transactions for the year –

	Shares	*Amount*
		(in thousands)
Common shares issued, beginning of year	126,170	$1,285,110
Stock option plan	42	391
Stock dividends	744	10,069
Share purchase plan	358	6,616
Common shares issued, end of year	127,314	1,300,186
Company's pro rata interest in its shares held by subsidiary and associated companies	9,772	121,696
Net shares	117,542	$1,178,490

The earnings per share calculations have been based on the weighted average number of shares outstanding, 116,727,479 in 1982 and 105,288,087 in 1981.

(d) Preferred shares –

Of the 3,585,000 preferred shares outstanding at December 31, 1982, 512,556 are held by associated companies. The Company's pro rata interest of $18,505,000 in those shares has been deducted from shareholders' equity.

(e) Summary of dividends –

	1982	*1981*
		(in thousands)
During the year the following dividends were declared:		
Common	$ 95,039	$ 163,188
Preferred	33,818	24,876
Total	128,857	188,064
Less the Company's pro rata share of dividends paid to subsidiary and associated companies	11,184	16,469
Net charge to retained earnings	$ 117,673	$ 171,595

(f) Stock options –

During the year ended December 31, 1982, 42,260 shares were issued under the Company's stock option plan for $391,000 and options on 5,700 shares were cancelled. At December 31, 1982 options on 990,993 shares were outstanding, exercisable at prices varying from $8.34 to $22.91 for periods up to 1989. The Company has reserved 1,615,652 shares for issuance under this plan.

(g) Share purchase plan –

Under the Company's share purchase plan, shares are sold to a trustee for resale to employees financed by an interest-free loan from the Company. At December 31, 1982, the amount of the loan included in accounts receivable was $11,887,000

(h) Purchases for cancellation –

Shareholders have the right to receive either cash dividends or the equivalent in common shares. Under an exemption order of the Ontario Securities Commission the Company may purchase for cancellation on an annual basis through the facilities of the Toronto Stock Exchange a number of common shares approximately corresponding in number to the common shares issued by it as stock dividends, subject to certain conditions. During 1982, 744,000 shares were issued as stock dividends and no shares were purchased for cancellation.

7. Related Party Transactions

The following summarizes the related party transactions during the year between Noranda and associated companies.

(a) Sale of goods and services at market prices on normal trade terms amounted to $40,908,000 and gave rise to accounts receivable at December 31, 1982 of $7,570,000 (1981 - $52,466,000 and $10,560,000 respectively).

(b) Purchase of goods and services at market prices on normal trade terms amounted to $78,149,000 and gave rise to accounts payable at December 31, 1982 of $340,000 (1981 - $114,624,000 and $7,949,000 respectively).

(c) Noranda and associated companies participate in a short-term investment pool, which gave rise to accounts receivable of $19,450,000 at December 31, 1982 (1981 - $10,550,000). Interest charges and credits are calculated at market rates.

8. Business Segment Information *(in thousands)*

Noranda operates in three industry segments: Mining of copper and other metals such as zinc, lead, silver, gold, molybdenum, phosphates and potash, related metallurgical operations and oil and gas production; Manufacturing of brass mill products, wire and cable, iron foundry products, wire rope, plastic pipe, primary aluminum and aluminum sheet, extrusions and building products; Forest Products such as lumber, plywood, waterboard, market pulp and paper.

Operations and identifiable assets by geographic area and industry segment are presented below:

(a) Geographic areas

Revenue:	1982	1981
Canada - domestic	$1,135,579	$1.235,705
- export	891,129	922.526
	2,026,708	2.158.231
U.S.A.	803,489	872.163
Total	$2,830,197	$3.030.394

Segment operating profit:		
Canada	$ 177,366	$ 314,291
U.S.A.	(58,520)	78.530
Total	$ 118,846	$ 392.821

Identifiable assets:		
Canada	$4,179,769	$3.897.985
U.S.A.	1,394,358	1.188.962
	5,574,127	5.086.947
Cash and marketable investments	130,763	161.697
Total	$5,704,890	$5.248.644

(b) Industry segments

Revenue:		
Metals and minerals		
Copper	$ 390,417	$ 448.054
Other	543,944	689.313
Oil and gas	86,604	83.917
	1,020,965	1.221.284
Manufacturing	1,219,337	1.181.360
Forest products	653,376	731.706
	2,893,678	3.134.350
Inter-segment sales	(100,000)	(190.000)
Investment income	36,519	86.044
Total	$2,830,197	$3.030.394

Excludes Noranda's share of revenues of associated companies accounted for on an equity basis, as follows: mining operations $268.236, manufacturing $286.860, forest products $1.048.570 ($264.256, $339.066 and $811.627 respectively in 1981).

Segment operating profit:	1982	1981
Metals and minerals -		
Copper	$ 22.190	$ 21.111
Other	(15.324)	99.701
Oil and gas	76.394	59.886
	83.260	180.698
Manufacturing	(23.164)	95.430
Forest products	58.750	116.693
Total segment operating profit	118.846	392,821
Exploration	(98,268)	(121,601)
Income and production taxes	65.890	(59,415)
Minority interest	(6,457)	(9,079)
Share of losses in associated companies	(74,659)	(1,503)
Interest expense	(145,525)	(95,444)
Unusual items	57,229	59,027
Earnings (loss)	$ (82,944)	$ 164.806

Earnings (loss) after taxes:		
Metals and minerals -		
Copper	$ 12,637	$ 22,663
Other	(6,686)	24.575
Oil and gas	24,684	34,818
	30,635	82,056
Less exploration	(52,826)	(66,312)
	(22,191)	15.744
Manufacturing	(14,234)	58.613
Forest products	(55,704)	21.078
Earnings (loss) before borrowing cost	(92,129)	95.435
Less cost of borrowing (net of investment income and taxes)	48.044	10.344
	(140,173)	105,779
Unusual items	57.229	59.027
Earnings (loss)	$ (82,944)	$ 164.806

Total assets employed:	1982	1981
Metals and minerals -		
Copper	$ 856,850	$ 701,244
Other	1,504,305	1,429,083
Oil and gas	364,488	334,787
	2,725,643	2,465,114
Manufacturing	1,421,037	1,254,083
Forest products	1,527,447	1,457,750
Inter-segment receivables/payables	(100,000)	(90,000)
	5,574,127	5,086,947
Cash and marketable investments	130,763	161,697
Total	$5,704,890	$5,248,644

Capital expenditures:		
Metals and minerals -		
Copper	$ 50,883	$ 66,455
Other	126,358	159,160
Oil and gas	64,611	70,984
	241,852	296,599
Manufacturing	272,452	203,501
Forest products	148,443	894,199
Total	$ 662,747	$1,394,299

Depreciation and amortization:		
Metals and minerals -		
Copper	$ 31,063	$ 36,975
Other	68,430	56,862
Oil and gas	5,662	4,979
	105,155	98,816
Manufacturing	33,207	27,464
Forest products	30,743	31,393
Total	$ 169,105	$ 157,673

9. Unusual Items

(a) 1982 - Sale of Tax Benefits

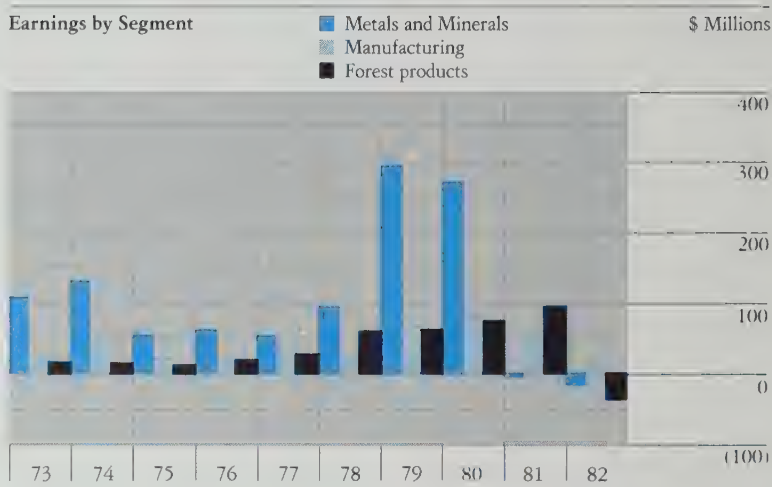
Pursuant to the U.S. Economic Recovery Act of 1981 certain subsidiary and associated companies sold tax benefits in 1982 for a net gain of $57,229,000 after income taxes and related expenses.

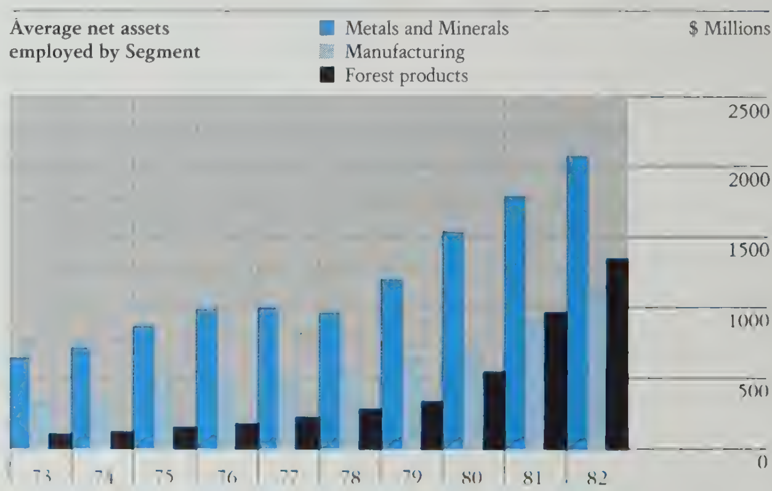
(b) 1981 - Gain on Sale of Shares and Other

Noranda disposed of its interest in British Columbia Forest Products Limited for an unusual gain of $76,704,000 net of tax and expenditures related to the Ontario mine project amounting to $17,677,000 after tax were written off.

10. Subsequent Events

Subsequent to the year end the Company has arranged for the sale of $140,000,000 variable rate serial debentures due 1986 to 1990. It is intended that the proceeds will be used to reduce short-term debt.





Effects of Inflation

The financial strength of companies and individuals is greatly eroded by inflation, but the measurement of that erosion is difficult. A committee appointed by the Ontario government in 1977 recommended an approach that attempts to show the effect of inflation on funds generated by a business.

Application of this method to Noranda's 1982 results, using a Statistics Canada index (Business Component of the Gross Capital Formation part of the Implicit Price Index), produces the statement shown on the right. It should be emphasized that this is a general business index which may not reflect the full impact of inflation on the costs of the company. However, the intent of the statement is to provide only a perspective.

Funds generated from operations (total from statement of changes in financial position)		$ 113,700,000
From this, deduct the funds required to pay for the original cost of productive assets (historical cost depreciation)		169,100,000
Which results in this shortage of funds, on a historical accounting basis		(55,400,000)
And to take account of the increased cost of maintaining operating capacity in our inflationary environment, the following funds are also required:		
To replace inventories at higher prices	$ 40,000,000	
For plant, machinery and equipment at higher prices	160,000,000	
	200,000,000	
But, partly offsetting these requirements, additional funds may be available from borrowing if present debt-equity ratio is maintained	47,000,000	153,000,000
Which leaves an overall shortage of funds with nothing available from the year's operations for dividends or expansion		$(208,400,000)

This statement demonstrates that in 1982 $369.1 million ($169.1 million plus $200 million) should have been spent to maintain the business, given the level of inflation Canada has been experiencing, of which $47 million could be borrowed. The company generated $113.7 million which on this basis would have left a shortage of $208.4 million before any distribution to shareholders or expenditure on growth, assuming no change in the existing debt-equity ratio.

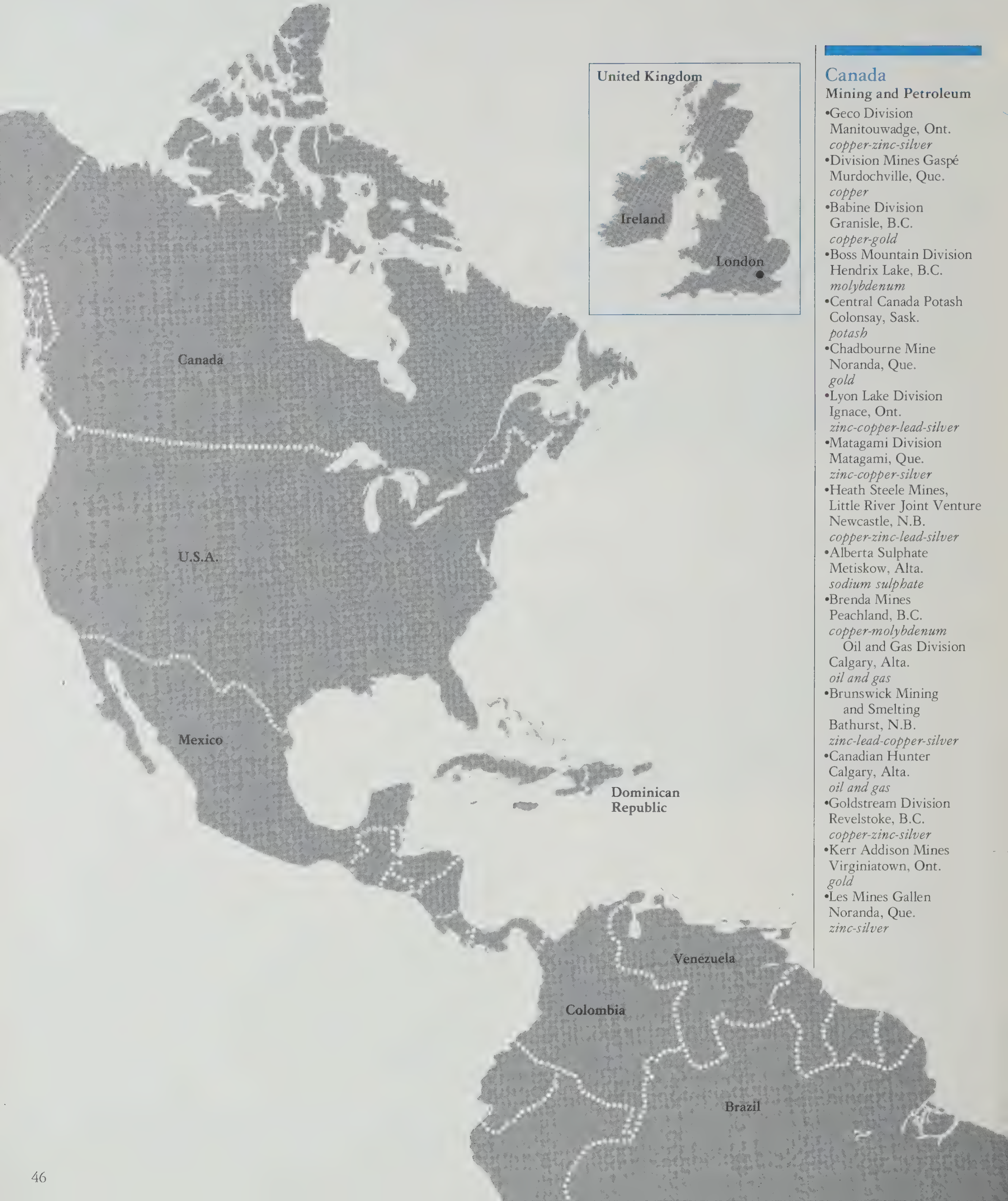
What in fact happened in 1982 was that we spent some $391.4 million on plant and working capital to maintain the business, $490 million in acquisitions and expansion of facilities and $120.9 million to pay dividends to shareholders. $917 million of outside capital had to be raised to help pay for these expenditures.

By this measure Noranda spent $22.3 million more than the calculated amount necessary to maintain the business. This partially makes up for the erosion of the capital base in prior years but is overshadowed by the fact that Noranda had to borrow the necessary money. Similarly the modest dividend, representing a 4.2% return on shareholders equity, and the expansion expenditures came out of borrowed funds. Consequently the debt to equity ratio deteriorated during the year.

The current world recession has worsened the problem of maintaining Noranda's financial strength and its ability to provide employment in a prolonged period of high inflation.

Operating Interests

(December 31, 1982)



Canada

Mining and Petroleum

•Geco Division
Manitouwadge, Ont.
copper-zinc-silver

•Division Mines Gaspé
Murdochville, Que.
copper

•Babine Division
Granisle, B.C.
copper-gold

•Boss Mountain Division
Hendrix Lake, B.C.
molybdenum

•Central Canada Potash
Colonsay, Sask.
potash

•Chadbourne Mine
Noranda, Que.
gold

•Lyon Lake Division
Ignace, Ont.
zinc-copper-lead-silver

•Matagami Division
Matagami, Que.
zinc-copper-silver

•Heath Steele Mines,
Little River Joint Venture
Newcastle, N.B.
copper-zinc-lead-silver

•Alberta Sulphate
Metiskow, Alta.
sodium sulphate

•Brenda Mines
Peachland, B.C.
copper-molybdenum

Oil and Gas Division
Calgary, Alta.
oil and gas

•Brunswick Mining and Smelting
Bathurst, N.B.
zinc-lead-copper-silver

•Canadian Hunter
Calgary, Alta.
oil and gas

•Goldstream Division
Revelstoke, B.C.
copper-zinc-silver

•Kerr Addison Mines
Virginiatown, Ont.
gold

•Les Mines Gallen
Noranda, Que.
zinc-silver

•Mattabi Mines
Ignace, Ont.
zinc-copper-silver
•Pamour Porcupine Mines
Pamour, Ont.
gold
•Placer Development
Vancouver, B.C.
•Endako Mine
•Fraser Lake, B.C.
molybdenum
•Equity Silver Mine
Houston, B.C.
silver, copper
•Gibraltar Mines
McLeese Lake, B.C.
copper
•Placer CEGO Petroleum
Calgary, Alta.
oil and gas
•Noranda Sales
Toronto, Ontario
resource marketing
•Nutrite
Montreal, Que.
fertilizer marketing

Metallurgical
•Horne Division
Noranda, Que.
copper smelter
•Division Mines Gaspé
Murdochville, Que.
copper smelter
•Division CCR
Montreal East, Que.
copper refiner
•Belledune Fertilizer
Belledune, N.B.
diammonium phosphate
•Brunswick Mining and Smelting
Belledune, N.B.
lead smelter
•Canadian Electrolytic Zinc
Valleyfield, Que.
zinc reduction
•Federated Genco
Burlington, Ont.;
Lachine, Que.
metal alloys

Forest Products
•Fraser Inc.
Edmundston
Atholville, Kedgwick and Plaster Rock, N.B.
Thorold, Ont.
boxboard, lumber, pulp and paper
•James Maclaren Industries
Buckingham
Masson, Thurso
Notre Dame du Laus and High Falls, Que.
newsprint, pulp, lumber and hydro power
•Sogefor
Lac-des-Iles, Que.
particleboard
•Normick Perron
La Sarre, Beattyville, Amos, and Senneterre, Que.;
Kirkland Lake and Cochrane, Ont.
lumber, plywood and waferboard
Maniwaki Industries
Maniwaki, Que.
lumber, veneer and flooring
•MacMillan Bloedel
Vancouver
Powell River and Port Alberni, Nanaimo and New Westminster, B.C.
Regina and Hudson Bay, Sask.
Calgary and Edmonton, Alta.;
Nipigon, Thunder Bay, Sturgeon Falls, Pembroke, Rexdale, Guelph and London, Ont.;
Winnipeg, Man.;
Montreal, Que.;
lumber, plywood, waferboard, particleboard, pulp, paper, newsprint, hardboard, siding, bags, corrugated containers
22 Sales Offices and Distribution Centres
•Northwood Mills
Toronto, Brampton and London, Ont.;
Burnaby, B.C.; Edmonton and Calgary, Alta.;
Winnipeg, Man.;
Boucherville and St. Augustin, Que.;
Moncton, N.B.
lumber and panelboard
•Northwood Pulp and Timber
Prince George
Houston, Shelley and Upper Fraser, B.C.;
Chatham, N.B.
lumber, pulp, waferboard and plywood
•B.C. Chemicals
Prince George, B.C.
chlorate and tall oil

Manufacturing
•Canada Wire and Cable
Toronto
Fergus and Orangeville, Ont.;
Montreal East and Quebec City, Que.; Winnipeg, Man.; Weyburn, Sask.;
New Westminster, B.C.
copper rod, wire and cable
Eight distribution centres
•Canwirco Inc.
Toronto
Simcoe and Belleville, Ont.;
Montreal, Que.
magnet wire
•Canplas Industries
Barrie, Ont.
New Westminster, B.C.
plastic moulding
•Grandview Industries (Rexdale) Toronto
Brampton and Mississauga, Ont.;
Weyburn, Sask.;
Langley, B.C.
plastic moulding and extrusion
•James Maclaren Industries
•Norpak
Kanata, Ont.
computer graphics display system
•Lumonics
Kanata, Ont.
lasers
•Noranda Metal Industries
Montreal East, Que.
Fergus, Ont.,
New Westminster, B.C.
Mont Joli, Que;
Moncton, N.B.
copper and alloys, strip, rod and tube
secondary metal
•NorSand Metals Inc.
Arnprior, Ont.
high nickel and stainless tube
•Wire Rope Industries
Montreal and Pointe Claire, Que.,
Truro, N.S.;
Vancouver, B.C.
steel wire rope, strand and slings
11 service centres
•Gourock Division
Halifax, N.S.
fishing nets, supplies and industrial cordage
2 service centres

U.S.A.

•American Hunter
Denver, Colorado
oil and gas
•Bridon American
Wilkes Barre, Pa.
hi-carbon wire and steel wire rope
•Canada Wire and Cable
•Carol Cable Company Inc.
Pawtucket, Woonsocket, Warren, Lincoln, and Central Falls, R.I.; Manchester, N.H.;
New Bedford and Taunton, Mass.; River Grove, Ill.;
Rancho Dominguez, Cal.
wire and cable
•Fraser Inc.
•Fraser Paper
Madawaska, Maine
paper
•MacMillan Bloedel
Pine Hill, Ala.;
Edenton, N.C.;
Elmira, N.Y.; Jersey City and Union, N.J.;
Odenton, Maryland;
Cleveland, Ohio; Chicago, Ill.; Little Rock, Arkansas;
Magnolia, Miss.;
Houston, Texas
linerboard and medium
lumber and plywood
corrugated containers
13 sales offices and distribution centres.
•Noranda Aluminum
New Madrid, Mo.
aluminum reduction, wire and cable.
•Norandal
Huntingdon, Tenn.
aluminum sheet and foil
•Norandex
Cleveland, Ohio and Chicago, Ill.
aluminum, building products
60 distribution centres
•Noranda Grey Eagle
California
gold and silver
•Noranda Lakeshore Mine
Arizona
copper
•Noranda Metal Industries
Newtown, Conn.
heat transfer tube and components
•Noranda Sales
•Rudolf Wolff
New York
commodity brokers
•Canadian American Metal
New York
resource traders
•Norcoal
Charleston, West Virginia
coal trading
•Northland Gold
Alaska
gold
•Northwood Pulp and Timber
•Northwood Panelboard
Bemidji, Minn.
waferboard
•Placer Development
•Golden Sunlight Gold Mine
Montana
gold
•McDermitt Mine
Nevada
mercury
•Wire Rope Industries
•Gourock Division,
Washington, D.C.
fishing nets, supplies and industrial cordage

Other Countries

•Canada Wire and Cable (International)
•Alambres Dominicanos
Dominican Republic
•Fadaltec, Colombia
•Iconel, Venezuela
•Industrias Conductores
Monterrey, Mexico
•Irish Cable & Wire
Republic of Ireland
•Nigerchin Electrical Development Co.
Nigeria
•Tolley Holdings
New Zealand
•Transage, South Africa
wire and cable and other manufactured products
•Cia Minera Las Cuevas
Mexico
fluorspar
•Eluma S.A., Brazil
copper and brass mills
•MacMillan Bloedel, U.K.
Hatfield, Hertfordshire:
Southall, Hanwell:
West Auckland, Durham:
Nelson, Lancashire;
Weston-super-Mare, Avon: Irvine, Avrshire
corrugated containers
•Koninklijke Nederlandse Papierfabrieken
Holland and Belgium
paper and packaging
•Celupal S.A., Spain
paper
•Embrasca-Empreendimentos Florestais e Agricolas
Brazil
lumber
•Friguia, Republic of Guinea
alumina
•Noranda Sales Corporation of Canada
London, U.K.,
resource marketing
•Rudolf Wolff Group
London, U.K.:
Zurich, Switzerland:
Hamburg and Frankfurt, West Germany
•Elnor Comercio E Representacoes S.A.
Sao Paulo, Brazil
metal marketing
•Placer Development
•Marcopper Mining
Philippines
copper
•Minera Real de Angeles
Mexico
silver-lead-zinc
•Tara Exploration and Development
•Tara Mines
Republic of Ireland
zinc-lead.

Financial Statements
Another Perspective

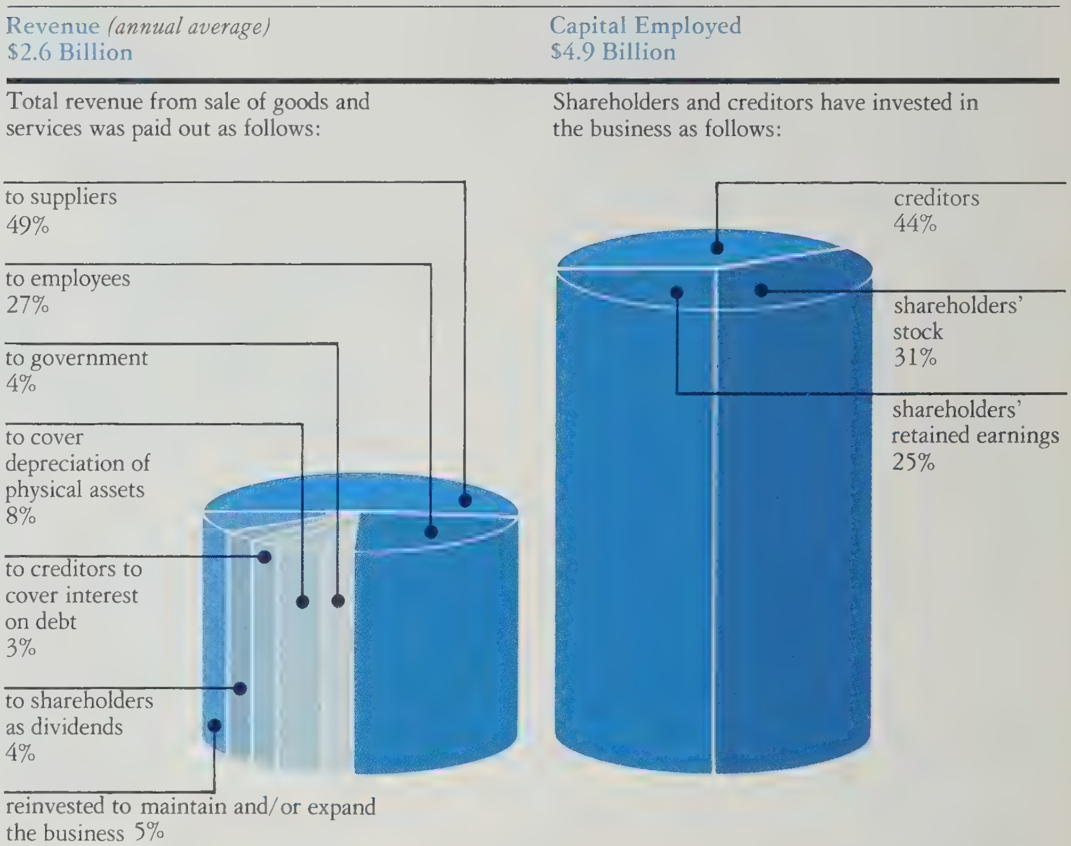
Revenue

Over the past five years the value of all goods and services generated by the Noranda Group has averaged some $2.6 billion per year. The accompanying chart attempts to show the primary distribution of this large sum.

The bulk of the revenue — some 76% — has been paid out to suppliers and employees each year to reimburse them for materials and services rendered.

Government's direct share, in the form of taxes on earnings has averaged about 4% of total revenue. This take has resulted from tax rates that vary from 35% to 80% of earnings depending on the tax jurisdiction and nature of the business. It is important to note that this calculation excludes sales taxes, municipal property taxes and the income and other taxes paid by suppliers and employees as a result of their sharing in the total revenue. Based on the fact that government spending is known to be in the order of 40% of our economy's Gross National Product, it can be safely estimated that some 40% of Noranda's revenue finds its way into government hands from all parties who share in this revenue.

Shareholders and creditors have received an average of some 7% of revenue each year in the form of dividends and interest. In addition earnings reinvested in the business accruing to the account of shareholders has averaged some 5% of revenue. It is this retention of earnings for reinvestment in the business that offers the best measure of economic health.



Capital employed

The amount of capital now employed has grown to some $4.9 billion. This investment includes property, plant and equipment as well as the working capital needed to run the day-to-day business. It has been funded approximately 75% by shareholders through their initial investment and by creditors who have loaned money to the business, and 25% by shareholders through earnings retained in the business. The issue of new shares and debt has represented a more significant source of new investment over the past five years than internally generated cash flow due to unsatisfactory earnings performance.

Return on investment

The return to shareholders and creditors, paid out and retained, has averaged 9.8% on capital employed over the past five years, sinking to the unsatisfactory level of 4.3% in 1981 and to a negative value in 1982. Considering the cyclical nature of the industries Noranda operates in, the long lead times on new investment, the perceptibly higher average risks involved in its business, and the erosion caused by inflation, there is a need for a much higher rate of return on capital for the business to remain in a healthy state.

Financial History
($ in millions)

Earnings

Earnings	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Revenue	850.6	1,151.9	1,159.3	1,234.8	1,395.8	1,691.1	2,484.7	2,889.3	3,030.4	2,830.2
Expense — excluding interest	721.7	889.9	1,046.5	1,118.1	1,250.3	1,426.0	1,810.8	2,244.6	2,700.2	2,752.3
Interest expense	19.8	33.8	45.3	61.7	71.9	64.8	65.3	48.4	95.4	145.5
Income and production taxes	54.2	106.6	41.5	25.1	22.7	90.5	227.0	242.2	59.4	(65.9)
Minority interest in earnings of subsidiaries	1.3	17.1	10.1	10.1	12.6	24.8	57.2	28.9	9.1	6.5
Earnings of Noranda and subsidiaries	53.6	104.5	15.9	19.8	38.3	85.0	324.4	325.2	166.3	(8.2)
Share of earnings (losses) in associates	67.9	50.4	34.6	26.9	33.5	49.3	70.1	83.1	(1.5)	(74.7)
Earnings	121.5	154.9	50.5	46.7	71.8	135.2	394.5	408.4	164.8	(82.9)

Financial Position

Capital employed	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Working capital	146.6	182.9	188.0	197.5	167.3	281.6	687.4	821.5	867.0	1,041.7
Investments and advances	220.6	326.0	372.2	361.9	387.8	410.0	406.1	529.4	1,159.3	1,097.3
Fixed assets — net	582.7	685.0	805.5	855.5	898.0	958.8	1,236.0	1,536.9	2,037.2	2,498.0
Other assets	69.6	90.8	104.6	118.5	115.8	123.3	189.3	262.5	316.0	302.9
	1,019.5	1,284.7	1,470.3	1,533.4	1,568.9	1,773.7	2,518.8	3,150.3	4,379.5	4,939.9
Capital sources										
Shareholders' equity	577.7	692.8	696.4	715.3	758.7	884.4	1,463.2	2,001.0	2,869.4	2,705.9
Long-term debt	335.6	383.7	533.1	603.4	588.9	604.1	602.5	580.5	922.3	1,722.9
Minority interest in subsidiaries	44.2	99.9	114.4	120.3	128.2	150.9	194.0	199.0	210.2	147.3
Other	62.0	108.3	126.4	94.4	93.1	134.3	259.1	369.8	377.6	363.8
	1,019.5	1,284.7	1,470.3	1,533.4	1,568.9	1,773.7	2,518.8	3,150.3	4,379.5	4,939.9

Changes in Financial Position

Sources	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
From operations	135.6	244.3	126.9	83.9	145.9	218.3	605.9	570.0	301.2	113.7
Issue of shares and debt (net)	(14.3)	38.4	139.3	70.3	(10.1)	36.4	255.8	228.7	1,028.6	817.6
Other (net)	11.3	8.9	1.0	8.8	(3.1)	15.7	(21.2)	(16.4)	131.2	95.8
	132.6	291.6	267.2	163.0	132.7	270.4	840.5	782.3	1,461.0	1,027.1
Application										
Dividends	32.9	42.3	47.2	28.3	28.3	30.7	70.8	126.9	172.0	117.7
Capital expenditure — Fixed assets	82.9	101.7	158.2	115.6	119.6	115.1	284.9	293.0	596.5	662.7
Investments and advances (net)	(36.0)	73.4	31.0	(21.9)	7.3	(2.1)	(2.0)	(2.1)	573.3	29.1
Other, including acquisitions	35.5	37.9	25.7	31.6	7.6	(12.5)	81.0	230.3	73.7	42.9
Increase (decrease) in working capital	17.3	36.3	5.1	9.4	(30.1)	114.2	405.8	134.2	45.5	174.7
	132.6	291.6	267.2	163.0	132.7	270.4	840.5	782.3	1,461.0	1,027.1

* Common shares data

Per share — $	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Earnings (loss)	1.72	2.20	0.71	0.66	1.01	1.91	4.70	4.06	1.33	(1.00)
Dividends	0.47	0.60	0.67	0.40	0.40	0.43	0.85	1.25	1.40	.75
Market price range — $										
High	19.79	18.00	13.25	13.25	11.46	13.00	22.83	33.63	36.38	27.88
Low	13.83	8.88	9.08	8.79	6.54	6.88	12.13	22.13	19.38	11.38
Close	16.71	9.50	9.71	9.67	8.33	12.25	22.37	30.00	22.50	19.50
Common shares issued (000)	73,031	73,327	73,354	73,392	73,394	75,548	101,536	113,274	126,170	127,314
Preferred shares issued (000)	—	—	—	—	—	—	—	—	3,583	3,583

* Previous years data adjusted for the 3 for 1 split in August, 1979

noranda

Printed in Canada

Noranda Mines Limited
P.O. Box 45, Commerce Court West
Toronto, Ont., Canada M5L 1B6

noranda

To the Shareholders:

TAKE NOTICE that the Fifty-Ninth Annual Meeting of the Shareholders of NORANDA MINES LIMITED will be held in the Concert Hall, at the Royal York Hotel in the City of Toronto, Ontario, on Friday, the 30th day of April, 1982, at the hour of 2:30 o'clock (Toronto time) in the afternoon for the following purposes:

(i) to receive reports and financial statements;
(ii) to elect directors;
(iii) to appoint auditors and authorize the directors to fix their remuneration.

A copy of the reports and the financial statements to be laid before the Meeting is forwarded herewith.

Shareholders who are unable to attend the meeting in person are requested to date, sign and return the enclosed form of proxy in the return envelope provided.

DATED this 19th day of March, 1982.

By Order of the Board,

R. C. ASHENHURST,
Vice-President and Secretary.

noranda

INFORMATION CIRCULAR

This Information Circular accompanies the Notice of the Annual Meeting of the Shareholders of Noranda Mines Limited (the "Corporation") to be held on April 30, 1982 and is furnished in connection with the solicitation by the management of the Corporation of proxies for use at the Meeting. The solicitation will be primarily by mail but proxies may also be solicited by regular employees of the Corporation. The cost of such solicitation will be borne by the Corporation.

A proxy in the form enclosed with the Notice of Meeting confers discretionary authority with respect to amendments or variations to the matters identified in the Notice. The shares represented by such a proxy will be voted by the persons designated therein.

A shareholder has the right to appoint a person (who need not be a shareholder) to represent him at the Meeting other than the persons designated in the form of proxy enclosed with the Notice of Meeting. Such right may be exercised by inserting the name of such person in the blank space provided in such form of proxy.

A proxy in the form enclosed with the Notice of Meeting may be revoked at any time before it is exercised.

VOTING SHARES AND PRINCIPAL HOLDERS THEREOF

At the close of business on March 15, 1982, 126,172,974 Common Shares and 3,585,364 9½% Cumulative Redeemable Preferred Shares Series A ("Preferred Shares") of the Corporation were outstanding. Each Common Share entitles the holder to one vote on all matters to come before the Meeting. Common shareholders of record at the time of the Meeting are entitled to vote at the Meeting.

The management of the Corporation understands that at March 15, 1982, Brascade Resources Inc. owned 46,860,975 Common Shares (37.1%) and 2,135,278 Preferred Shares (59.6%) of the Corporation and Zinor Holdings Limited owned 20,846,870 Common Shares (16.5%) and 804,967 Preferred Shares (22.4%) of the Corporation.

ELECTION OF DIRECTORS

It is proposed to nominate the persons listed below for election as directors of the Corporation to serve until the next Annual Meeting of the Shareholders of the Corporation or until their successors are duly elected or appointed, unless any such person is not available to act as a director, in which event a substitute may be nominated.

Proposed Nominees	Principal Occupation	Director Since	Number of Common Shares Owned March 15, 1982
* Jack L. Cockwell, Toronto, Ontario.	Executive Vice-President Brascan Limited. (Natural resources and consumer products)	1981	1,000
James C. Dudley, New York, New York.	Chairman, Dudley & Wilkinson Inc. (Investment Counsel)	1970	300
* J. Trevor Eyton, Q.C., Toronto, Ontario.	President and Chief Executive Officer, Brascan Limited. (Natural resources and consumer products)	1981	1,000
Brian M. Fleming, Q.C., Halifax, Nova Scotia.	Partner in the legal firm of Stewart, MacKeen & Covert since September, 1979 and prior to that a candidate for Federal office from March to September, 1979 and prior to that assistant principal Secretary to the Prime Minister of Canada from March, 1976 to March, 1979.	1981	500

Proposed Nominees	Principal Occupation	Director Since	Number of Common Shares Owned March 15, 1982
* Pierre Lamy, Montreal, Que.	Economist and consultant.	1981	—
Paul M. Marshall, ** Calgary, Alberta.	President and Chief Executive Officer, Westmin Resources Limited. (Natural resource, exploration and production)	1981	—
David E. Mitchell, Calgary, Alberta.	President, Alberta Energy Company Ltd. (Energy and Industrial related projects)	1973	11,100
* André Monast, Q.C., ** Quebec, Quebec.	Partner in the legal firm of Létourneau & Stein.	1966	9,450
Thomas H. McClelland, Vancouver, British Columbia.	Chairman of the Board Placer Development Limited. (Mining)	1975	2,654
Donald S. McGiverin, Toronto, Ontario.	President and Chief Executive Officer, Hudson's Bay Company. (Merchandising)	1980	1,500
* W. Darcy McKeough, ** Cedar Springs, Ontario	President, Union Gas Limited. (Gas transmission and distribution)	1979	1,099
Fernand Paré, ** Quebec, Quebec.	Président, La Solidarité, Compagnie d'assurance sur la vie. (Life Insurance)	1981	—
* Alfred Powis, Toronto, Ontario.	Chairman and President, Noranda Mines Limited.	1964	44,482
Antoine Turmel, Montreal, Quebec.	Chairman and Chief Executive Officer, Provigo Inc. (Food, pharmaceutical and general merchandise distribution)	1981	—
H. Richard Whitall, Vancouver, British Columbia.	Partner, Richardson Securities of Canada. (Investment Dealers)	—	1,000
* William P. Wilder, ** Toronto, Ontario.	President and Chief Executive Officer, Hiram Walker Resources Ltd. (Distilled spirits, oil and gas exploration and gas distribution)	1966	10,000
Harold M. Wright, Vancouver, British Columbia.	Chairman, Wright Engineers Limited. (Consulting and design engineers)	1981	1,120
* Adam H. Zimmerman, F.C.A., Toronto, Ontario.	Executive Vice-President, Noranda Mines Limited.	1974	55,910

* Members of the Executive Committee.
** Members of the Audit Committee.

NOTES: 1. Shareholdings in subsidiaries:

Mr. André Monast, Q.C., owns 10 Common Shares of Brunswick Mining and Smelting Corporation Limited.

Mr. Alfred Powis owns 10 Common Shares of Brunswick Mining and Smelting Corporation Limited and 3,500 Common Shares of Fraser Inc.

Mr. Harold M. Wright owns 1,000 Common Shares of Brunswick Mining and Smelting Corporation Limited and 1,200 Common Shares of Brenda Mines Ltd.

Mr. Adam H. Zimmerman owns 12,655 Common Shares of Fraser Inc.

2. The information as to shares beneficially owned, not being within the knowledge of the Corporation, has been furnished by the respective nominees.

REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

The following table sets forth the aggregate remuneration paid or payable by the Corporation and its subsidiaries to its directors and certain officers in respect of the fiscal year ended December 31, 1981 and the estimated aggregate cost to the Corporation and its subsidiaries for that year of all pension benefits proposed to be paid to those directors and officers under existing plans in the event of retirement at normal retirement age:

	Nature of Remuneration	
	Aggregate remuneration	Estimated aggregate cost of pension benefits
1.(i) Directors (Total number: 18)		
(A) from the Corporation and its wholly-owned subsidiaries	$ 349,199	
(B) from partially-owned subsidiaries:		
Brenda Mines Limited	10,000	
Brunswick Mining and Smelting Corporation Limited	22,894	
Fraser Inc.	7,200	
Wire Rope Industries Ltd.	12,000	
	52,094	
Total	$ 401,293	
(ii) Five senior officers: from the Corporation	$1,124,808	$ 93,936
(iii) Twenty-five officers receiving over $50,000 (includes (ii)): from the Corporation	$3,067,283	$202,066

2. Under a share purchase plan established in 1969, the Corporation from time to time advances money by way of interest-free loan to a trustee to be applied in payment of the subscription price of shares of the Corporation to be purchased by the trustee for sale to key employees. In February, 1982 $1,366,687 was advanced under the Plan for the purchase of an aggregate of 73,875 shares for sale to 21 key employees who were directors and/or senior officers. The said shares were authorized for issue on February 26, 1982 at a price of $18.50 per share, the closing price on The Toronto Stock Exchange on February 25, 1982. Indebtedness of senior officers under the plan during the year ended December 31, 1981 was and at present is as follows:

Name and municipality of residence	Largest amount during year ended December 31, 1981	Amount presently outstanding
Alfred Powis, Toronto, Ontario	$ 226,475	$ 364,100
William James, Toronto, Ontario	307,187	130,000
Adam H. Zimmerman, Toronto, Ontario	182,250	243,312
E. Kendall Cork, Toronto, Ontario	107,350	171,300
Donald H. Ford, Mississauga, Ontario	148,875	146,450
John A. Hall, Don Mills, Ontario	121,187	191,875
Keith C. Hendrick, Toronto, Ontario	146,625	194,187
J. Oswald Hinds, Toronto, Ontario	112,075	157,200
R. Peter Riggin, Q.C., Toronto, Ontario	119,725	167,600
William Allan, Vancouver, British Columbia	63,800	110,050
R. Carl Ashenhurst, Mississauga, Ontario	87,437	98,250
Alexander G. Balogh, Oakville, Ontario	72,800	135,237
Wilson J. Barbour, Islington, Ontario	53,500	67,625
Bruce C. Bone, Don Mills, Ontario	52,000	91,312
Gary H. Corlett, Toronto, Ontario	—	47,175
John M. Gordon, Saskatoon, Saskatchewan	79,500	98,250
Frank X. Koch, Toronto, Ontario	108,700	98,250
Camille Marcoux, Montreal, Quebec	66,700	106,012
Bernard H. Morrison, Mississauga, Ontario	143,675	132,925
Warren E. Stubbington, Mississauga, Ontario	113,900	104,375
H. Vincent Thomson, Oakville, Ontario	43,333	83,378
John C. White, Toronto, Ontario	49,400	87,850
Total	$2,406,494	$3,026,713

At March 15, 1982, 196 other key employees had loans totalling $9,158,098 under the plan.

Under a similar stock purchase plan of Fraser Inc., Adam H. Zimmerman is presently indebted for the amount of $32,768.

3. During 1981, an option to purchase 100 shares of the Corporation at $9.50 per share was exercised by a senior officer of the Corporation. For the 30 day period preceding the exercise of the option, the price range of the shares on the Toronto Stock Exchange was $25¼-$33⅞.

APPOINTMENT OF AUDITORS

The persons named in the form of proxy enclosed with the Notice of Meeting intend to vote for the appointment of Clarkson Gordon, Chartered Accountants, Toronto at a remuneration to be fixed by the directors.

DATED this 19th day of March, 1982.

Printed in Canada